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PĀTALIPUTRA ŚIVA-PĀRVATĪ GOLD PLAQUE

By K. P. JAYASWAL.

The relief (Pl. I.) is embossed on a concave plaque of pure gold. On the back of the plaque in the middle, there was a gold bar fixed from top to bottom. When the piece was discovered, the bar still stood attached to the back of the jaṭā-knot of the male image. The image is two and half inches in height. It was discovered by a servant of the Honourable Rai Bahadur Radhakrishna Jalan of the Patna city. It was found on the site of the Patna fort where it had been buried under-ground. We should recall to our mind that it was in the neighbourhood of the fort that the Dīdarganj stone image was discovered.

The plaque is well preserved apart from the lower portion of the male figure which is broken off.

Below the jaṭā-knot of the male figure there is a crescent-like band. Its left hand touches the bosom of the female figure. It is undoubtedly a plaque of Siva and his consort. The figures are not nimbate, the style of the female figure is that of the Didarganj image and the male figure is in line with the Patna statues. The absence of nimbus and the general treatment of our plaque, would assign the piece to the Maurya or Pre-Maurya time.

Images of Siva before the Maurya time were common. An image of his was carried in front of the army of Porus as he advanced against Alexander².

^{1.} Cf. The golden Pṛthvi image from Lauriyā Nandangarh, A. S. l., A. R. 1906-7; Bloch: Excavations at Lauriyā; See also the 'Golden Puruşa' of Agniśayana, Keith: Religion and Philosophy of the Veda, p. 354.

^{2.} Q. Curtius, VIII, 14, 11; Cunningham: Coins of Ancient India p. VII.

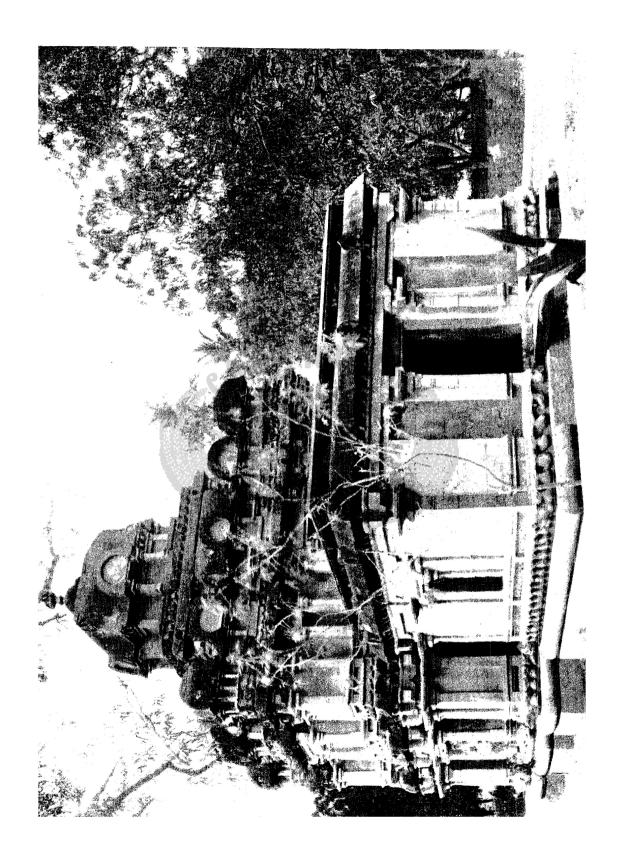
TWO COLA TEMPLES

By PERCY BROWN.



An instructive phase of Southern Indian architecture existed during the supremacy of the The dynastic history of these rulers began about 900 A.D., who, attaining the height of their power a century later, declined towards the middle of the 12th century, finally succumbing to the might of the Pandyas about 1150 A.D. For the first part of this period of 250 years the Colas were principally engaged in territorial aggrandisement, extending their dominion from Ceylon to the mouths of the Ganges, and even over the seas into Burma. Pre-occupied as they were in these conquests, during the formative stage of their evolution, which corresponds approximately to the 10th century A.D., the arts of peace appear to have received little encouragement, and few buildings of any note are to their credit. One small temple however is known which dates from the first half of the 10th century, as it was erected

during the reign of one of the earliest kings of the Cola dynasty, Parāntaka I, who reigned from A. D. 907 to 949. This is the temple of Koranganātha at Śrīnivāsanalūr, a hamlet in the Musiri taluk of the Trichinopoly district, the peculiar name of the building being due to the legend that on completion it was defiled by a monkey, korangu, and so was never consecrated (Plate II). The structure as a whole consists of the usual combination of the two essential parts of a temple, comprising an assembly hall or portico (maṇḍapa), and the





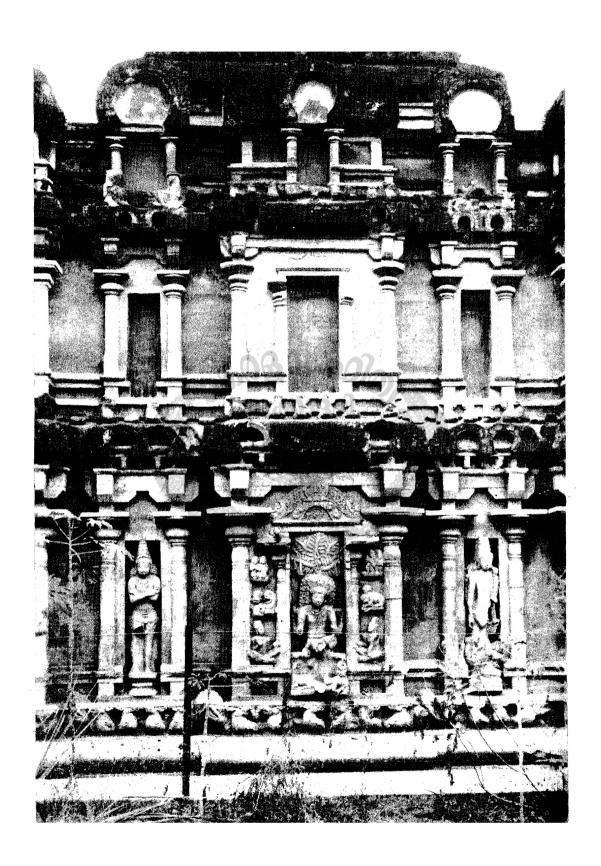
towered sanctuary (vimāna), the axial length of both together amounting to 50 feet. In plan the mandapa covers a rectangle 25 feet by 20 feet, while the vimāna is a square of 25 feet side, the height of the former being 16 feet and the latter 50 feet from the ground. Within, the small hall of the mandapa contains 4 pillars in antis, beyond which is a vestibule and passage leading to the cella, a square chamber of 12 feet side. (p. 7, Fig. 1).

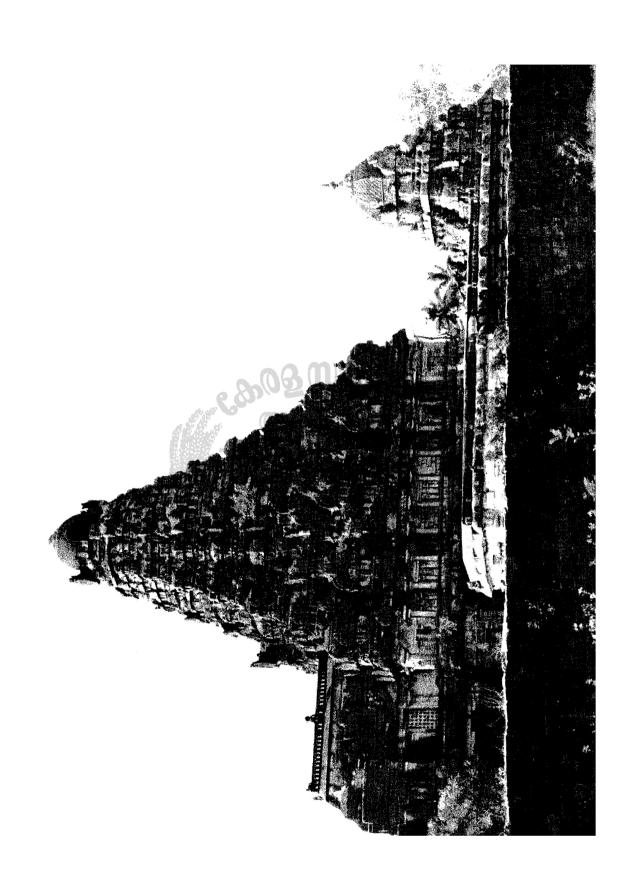
From these dimensions it will be seen that the Koranganatha is a temple of very moderate size. As an architectural conception however it is significant, as it illustrates an important stage in the development of the Dravidian style, standing as a landmark midway between the final efforts of the Pallavas, and the later and fully matured style of the Colas. Compared with the exuberant treatment of the later temples of the Pallavas the simplification of the whole composition is notable. (Plate III). It conforms to the same general principles as those of the preceding period but there is more breadth in the parts, less crowding in the disposal of the architectural ornamentation, and an appreciation of the value of plain spaces, which aids considerably in the effect. Moreover, gone is the lion pillar, sedant or rampant, and in its place is a conventional design composed of all that is best in the rock-cut pilasters of Māmallapuram. Yet it differs from the Pallava type in the shape of the capital, in other words the pillars of the Koranganatha illustrate the Cola interpretation of the Dravidian order. (p. 2). Two changes are noticeable in this distinctive feature of the style, one in the capital itself, the other in the abacus above. In the design of the former a neck-moulding (padmabhandam) has been introduced, where it joins on to the shaft, thus appropriating to itself a segment of the upper part of the shaft and at the same time adding another member to the lower part of the capital in the form of a pot (kalasa). As to the abacus, the palagai or "plank" is much expanded, so that combined with the flower-shape (idagi) underneath, it becomes the most striking element in the order. The carved decoration on this temple is unusually interesting, and one motif emerges which found a place in the subsequent buildings of the style. This is a string-course of demons' heads, squirming from under the structure as if their bodies were immured within the foundations, probably Rākṣasas, or earth-spirits, but the meaning of their introduction into the building in this manner is uncertain. It is however to the figure-sculpture that the eye naturally turns as this is of special merit (Plate IV). In the niches of the lower story of the vimana are standing life-size statues, broadly modelled and dignified in pose, fitting in admirably with the architectural scheme. But the principal figure-subject is a group occupying the centre of the southern side of the vimana, depicting Dakṣiṇā Mūrti surrounded by attendants, attributions, and vehicles,

associated with this manifestation of Siva. Apart from the wealth of symbolism contained in this ikon, the craftsmanship is of a high order, displaying a variety of influences, but in the main showing its derivation from that great school of plastic art which flourished some two centuries before, under the Pallavas at Māmallapuram.

The full maturity of the architecture of the Colas arrived less than a century later, as the temples of Tanjore and Gangaikondacolapuram, eloquently testify. Compared with the previous temple of Koranganatha, they are as cathedrals to a village church. Both built within the first quarter of the 11th century, they prove that, during the intervening period, the Colas had had their character revealed to themselves. The first of these great temples to be erected was that at Tanjore, probably the largest and highest structure of its kind hitherto undertaken by Indian masons. This building is however well-known, and has been frequently described. On the other hand the temple of Gangaikondacolapuram produced a little later, owing perhaps to the fact that it lies off the beaten track, has not received the attention that such a fine structure undoubtedly deserves. (Plate V). It is true that it has not those virile qualities, the masculine vigour, of its predecessor, but it possesses a rich and voluptuous beauty that suggests its feminine counterpart. Gangaikondacolapuram was a capital city of the Colas founded by Rajendra 1 (1018-33), but practically all that now remains of this great enterprise is the temple, standing in solitary state except for the huts of a village which has grown up around it. Situated 20 miles south-west of Cidambaram, and 17 miles by road from Kumbakonam, it thus lies between two towns famous for their religious architecture, mostly of a somewhat later date. It occupies the middle of a spacious walled enclosure (p. 7, Fig. 2), which may have been built partly for defensive purposes, as there is a large bastion on its south-west angle, and another smaller one on the west side. The temple as a whole covers a rectangle some 340 feet long and 100 feet wide, composed of a mandapa measuring 175 feet by 95 feet, and a vimana with a square plan of 100 feet side; between the two is a cross-vestibule or transept, the ends of which form north and south entrances, both picturesque doorways approached by flights of steps. (Pl. VI. Fig. 1).

The main doorway to the temple is at the eastern end of the mandapa, the architectural and sculptural surroundings of which being of a colossal order proclaim that an effort had been made to create a large and impressive portal. Although there is some fine bold work in this part of the conception, owing to a lack of unity as a whole it is disappointing. Through this doorway access is obtained to the mandapa, a large hall containing a forest of some 140 pillars arranged across its width in 8 rows. These rise from a plinth or platform 4 feet in height, through the centre of which



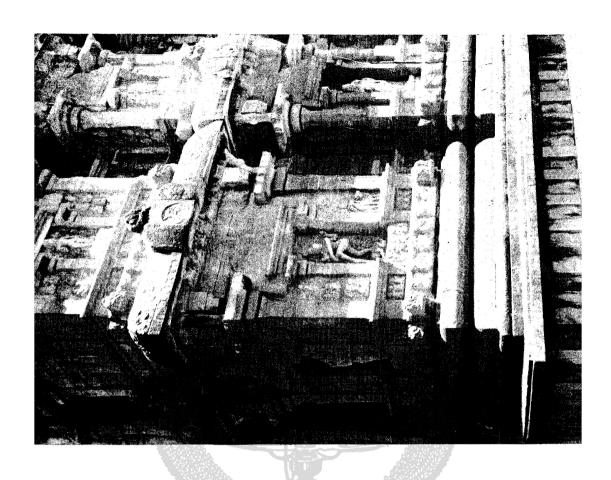


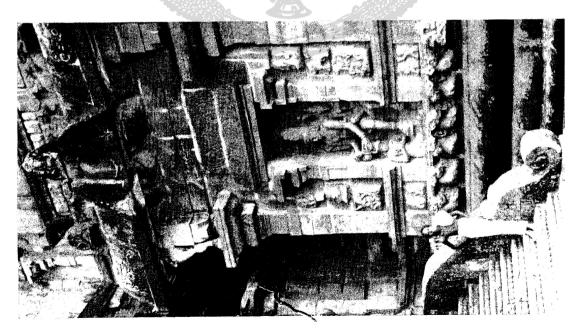
at ground level there is a wide aisle or passage, and there is a somewhat narrower passage at the same level round the interior circuit of the entire hall. Such a scheme of closely inter-columniated pillars may have been the origin of those thousand-pillared mandapas which became common in all the Drāvidian temple-complexes of a later date. This mandapa at Gangaikondacolapuram is covered by a flat roof which is 18 feet from the ground above the central aisle, and 16 feet on either side; the principal lighting of this great hall comes from the main doorway. An important part of the scheme is the vestibule or transept at the far end of the mandapa, the exterior of which is carried up above the roof of this pillared hall to form a pronounced double-storied mass between it and the pyramidal tower of the vimāna. In the compartment forming its interior are two rows of large square piers, eight in all, producing a colonnade across this vestibule, on the other side of which lies the "holy of holies" deep in the womb of the vimāna itself.

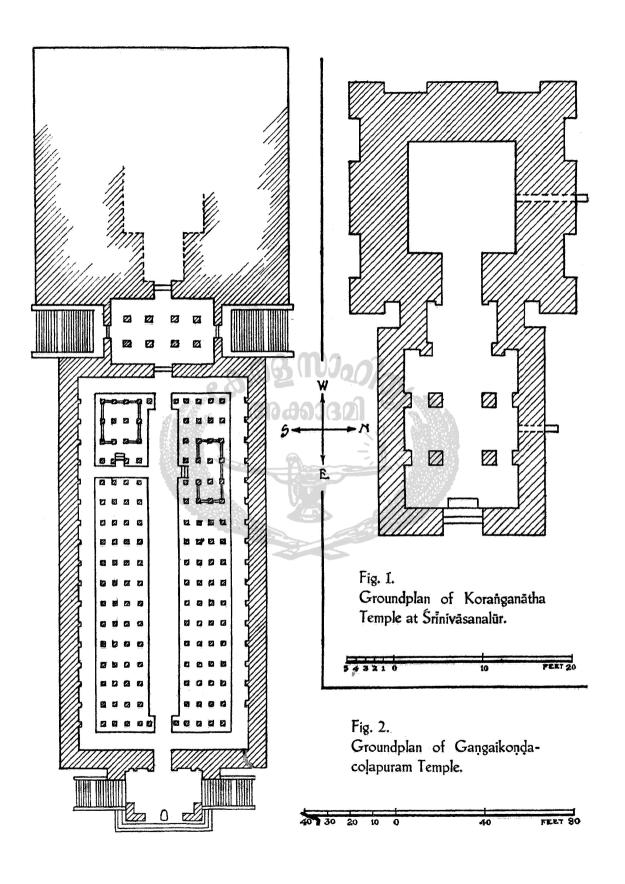
The mandapa and vestibule with all the structures forming the eastern portion of the temple, are however but a prelude to the main architectural feature of the scheme, the sanctuary with its tower or sikhara, which, rising up for some 150 feet, not only dominates the entire composition but is the keynote of the conception as a whole. Reduced to its simplest terms this great mass of masonry resolves itself into three parts, a vertical foundation, a pyramidal body, and a domical apex. The vertical foundation is 35 feet in height and divided into two stories by means of a massive cornice. Except for this sole horizontal feature its decorative treatment is mainly vertical, for its surfaces are relieved by an arrangement of pilasters artistically designed and disposed, not unlike the supercolumniation of the Romans. Eight diminishing tiers comprise the pyramidal portion, the lines of which are enriched by models of miniature shrines at regular intervals, a system of architectural decoration brought to great perfection by the Dravidian craftsmen. It is in this part of the building that there are indications of those sensuous curves which may denote that the style had passed beyond the narrow limits of its meridian. This is shown in the concave outline of the pyramid at its angles, and the embowed contours of its sides. Both these ultra-refinements are responsible for that fluent voluptuous grace already referred to. This wealth of embellishment is carried up into the cupola at its apex, where four ornamental "caitya" forms project like wings from the aerial dome of the finial. In spite of its almost cloying richness, viewed as a whole, there is a fine fullymatured beauty in this Cola masterpiece.

No account, however brief, of the Gangaikondacolapuram vimāna would be complete without some description of its sculptured decoration. This is displayed

mainly in the two stories of the square vertical base. The architectonic treatment of this portion of the vimana, by means of pilasters in high relief has been referred to, but allied with these are certain supplementary forms of considerable interest. Chief among these is a motif resembling a conventional tree-shape, its elegant lines and graceful shapes filling in very effectively some of the deeper recesses. Such forms, -and there are others of almost equal merit,-show great power of invention, being remarkably ingenious compositions and by themselves excellent, but in some instances they do not entirely co-ordinate with their surroundings, in other words there are passages which are not thoroughly understood. Combined with these architectural motifs are figure-subjects, statues in niches each in its appointed place, Națarāja on the S. W. angle, (Plate VI. Fig. 2), Siva in the flaming lingam on the west face, Ganesa on the south, Candi Kesa Anugrahamurti on the north (Plate VI. Fig. I), and so forth, all remarkably well-carved and fulfilling the purpose for which they were intended. On the surfaces around are flying Apsaras, Gana-devatās, Yakṣas and writhing Rākṣasas, contributing to a general effect of great richness and vitality. In this sculpture too it is easy to see that it is directly descended from the rock carvings at Māmallapuram, with the same traditions, and showing how little such things change even in the course of centuries. Yet there is a difference, subtle but quite definable, between the work of the sculptors of Narasimhavarman and those of Rajendra Cola. While there is the same feeling for rhythm, the same well-modelled forms, the same action and vitality as in the Pallava examples, there is a more sophisticated handling of the subject, a more conventional technique, an expression of self-consciousness, that is unmistakable in the finished sculptured images of the Cola school.







THE CENTRAL IMAGE OF THE BAYON OF ANGKOR THOM

By G. COEDES.

The construction of the actual town of Angkor Thom and of all the great stone buildings with towers having human faces on their four sides, has been attributed unanimously since 1928, to Jayavarman the VIIth (1181—about 1201 A. D.), the great Buddhist king of Cambodia.

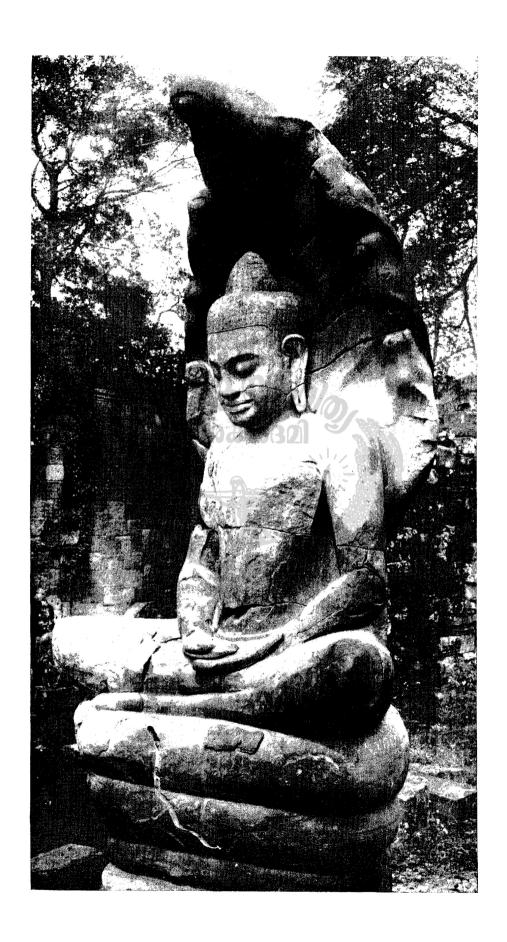
The geometrical centre of Angkor Thom is marked by the famous temple of Bayon. The architectonic symbolism of this monument has become obscured as its plan had to undergo two or possibly three modifications in the course of execution.² But one thing is certain. The central foundation wall corresponds to the "central mount" of the preceding capitals, i. e. to the Phnom Bakheng of the first Angkor (end of ninth century), to the great Prang of Koh Ker (about 920-945) and to the Phimeanakas and Baphuon of the eleventh century, only instead of a storeyed pyramid representing mount Meru, the pivot of the world, with the symbol of Khmer royalty, the Devarāja in the shape of a golden lingam, on its apex, this is a Buddhist monument constructed on a most complicated plan. The Buddhist character of the Bayon has been recognised in 1923, following the discovery of a gable which shows the Bodhisattva Lokesvara³. It has just become strengthened by a new discovery of M. Trouve, Conservator of Angkor.

M. Trouve in September 1933, discovered the opening of a vertical pit full of stones and rubbish of all kind in the middle of the central sanctuary of the Bayon under the high tower which he was engaged in consolidating. The clearing of this hole yielded the pieces of a very large statue of Buddha. It could be completely pieced together. Its large dimensions and most of all its style allow us to consider it as the original image of the temple (Plate /II).

^{1.} G. Coedes, La date du Bayon, B. E. F. E. O. XXVIII, p. 81.

^{2.} H. Parmentier, Modifications subie par le Bayon, B. E. F. E. (. XXVII, p. 149.

^{3.} L. Finot, Lokesvara in Indochina, Etudes Asiatiques, I, 245.



It may be asked why and by whom it has been broken and thrown into the pit which might have served originally as a passage for the traditional and sacred depot into the substructure of the monument. The answer is fairly easy. In fact, we know that a Hinduistic reaction took place, after the reign of Jayavarman the VIIth. Its traces are to be found on all the Buddhist monuments set up by this king. All the Buddha images were scraped and burned. They were replaced by bearded ascetics, lingas and other Brāhmanical emblems.

The destruction of the central image of the Bayon may be due to this reaction with its acts of vandalism. Or else it may be that treasure hunters first demolished the statue and then dug the pit which was to conduct them to the sacred depot, the object of their greed.

To us this statue is but one more Buddha figure amongst many others, but to Jayavarman it signified something more, no doubt.

The central mount of the ancient capitals served, as stated already, as pedestal of the lingam which contained, or rather itself was, the essence of royalty (rājyasāra). It is scarcely probable that Jayavarman the VIIth whose love of prestige is shown by all his foundations, should have repudiated the cult of Devarāja, several times of a secular nature. It is more likely that he should have attempted to adopt it to Buddhism which he professed. But could a Buddha statue be substituted for a lingam so as to integrate the essence of royalty and become God-king? Such doubt as may arise will be allayed after reading the penetrating remarks of M. Przyluski in his recent work on Buddhism.

"In the imagination of the humble, the Buddha image became modelled according to that of the universal monarch. The latter is a superhuman person. He equals the gods and he commands the hosts of spirits and men. In order to identify the Buddha with legendary kings, he is made to be born in a palace amidst luxury and pleasures. He is shown putting to flight the army of Mara, the evil one, and possessing himself of the cosmic tree, the possession of which bestows universal royalty. He is being attributed with a purple cloak similar to that of the Achaemenians, and finally the description of his funeral is borrowed from royal ceremony."

That the notion of Buddha-l we was wide spread in Cambodia is proved by the many images in every size and material which represent the Sage with the insignia of royalty. But, one would say, the Buddha of the Bayon does not wear

ornaments. Still, who can affirm that he was not decorated at least with mobile ornaments made of precious materials, exactly as the emerald Buddha in Bangkok who is also enthroned in the middle of the royal temple and is looked upon as the protector of the kingdom of Siam.

These remarks make appear less daring the hypothesis formulated by me here. It consists in considering the beautiful Buddha statue recently discovered in the Bayon as an image incarnating the essence of Khmer royalty.



THE LAMP-BEARER (DIPA LAKSMI?)

By G. YAZDANI.

Two years ago a shoe-maker of Mathwara (Warangal)¹, while digging earth for laying the foundation of his house, found some bronze bells and lamps, such as are used by Hindus for arati (worship). The find was subsequently reported to the Department of Archæology, Hyderabad and the articles were acquired as treasure-trove. On examination they were found to be much worn out and the apparent reason for theirdecay is that they have remained buried under earth for a long time.

The most important article in this find is a statuette (Pl. VIII), $6\frac{1}{8}$ th inches in height which may represent Laksmi, for bronze images of this goddess bearing lamps—Dipa Laksmis are common in Southern India². The lamp of this image is, however, missing and as it has no special symbol to prove the identification the guess must be accepted with caution. The statuette in certain features resembles the bronze sculpture of South India, but the modelling of the head and the expression of the face are absolutely different and they point to an independent school which may have flourished in the Deccan from the earliest times.

To describe the statuette in detail: it is nude down to the waist, but the lower part of the body is covered with a sārī with an ornamental border several bands of which may be seen above and around the knees. The style in which the sārī has been tucked in front is rather unusual, being in the form of the leaf of a tree. Sārīs are tucked in front in a similar style in South India, but the leaf pattern arrangement is apparently the invention of the artistic imagination of the sculptor³. The effect however is very pleasing. The style of dressing the hair and the knot at the back of head are characteristic of the early sculpture of the

^{1.} Mathwara is an important suburb of Warangal, Hyderabad, Deccan, being the chief centre of ground-nuts export in the Dominions. It is also noted for its silk industry.

^{2.} Vide South Indian Bronzes, by O § Gangoly, p. 25, Plates XXXV-XXXVI.

^{3.} Sāris are tucked in a similar st le in the figures shown in Plate X of the Bulletin of the Madras Government Museum, New Series, Vol. 1, Part. 2. The le f pattern is not so pronounced in these figures as in the present image.

Deccan, but they are also found in the bronze images of South India, for example see the coiffure of the consorts of Venugopāla at Chimakurti, Guntur District, which is almost identical with that of the present image. The large ear-rings (patra-kuṇḍalas) show an early period for the making of the image, for in later times ear-ornaments become much more elaborate and intricate in design. The image has also three ornaments round the neck one of which is a kanthī (collar) sticking to the neck, another a necklace a little longer than the former and the third a mālā or hāra hanging down to the breast. There is a chain round the waist, but its presence has been partly concealed by the ornamental border of the sārī. There are kangans round the wrists and karās round the ankles. All these ornaments are common in India even to this day.

The head of the figure has been modelled with great skill and imagination, for the features not only have a realistic effect in their technique but show much inner determination and religious zeal. The image, although small, exhibits the workmanship and vision of a master-sculptor and, as art in the Deccan became stereotyped and soulless after the 12th century, one may assign this statuette to a period not later than that. The treatment of the limbs and the style of the dress appear to be somewhat conventional²; otherwise the image, for artistic conception and nobility of feeling, may be compared with the fifth and sixth century work of India.

Owing to the paucity of genuine specimens of mediaeval (7th-12th century) bronze sculpture of the Deccan it is difficult to express any opinion on its special features but, if we take the standard from the present image, we may say that the art of bronze sculpture, in spite of its obvious conventionalities, had developed a realistic sense of representing objects in the round and above all it was permeated by a deep spirituality which is the key-note of Indian art in its best periods.

^{1.} Ibid.

^{2.} These features point to a later date for the sculpture.



FOOT-PATHS IN ANCIENT INDIAN TOWNS

By B. B. DUTT.

Foot-walks, paved or unpaved, for pedestrian traffic border the main thorough-fares of modern towns. Nowadays street-traffic has developed so much both in volume and variety that its bifurcation into two main classes, vehicular and pedestrian, and their segregation and direction along different ways have been a necessary and common feature of the streets in present-day cities. The subject of investigation, therefore, whether similar foot-paths were provided for at a time when towns were comparatively small and traffic was not so heavy and congested as at present, will be of exceeding interest.

The Amarkoşa gives the following synonyms of mārga (road): ayana, vartma, mārga, adhvā, panthā, padavī, sṛti, saranī, paddhati, padyā, vartanī, and ekapadī.¹ Of these, ayana, vartma, adhvā, panthā, and vartanī seem to convey no special connotation, no different shades that may be helpful to our investigation². Sṛti and saranī seem, from their radical meaning, to refer more to water-courses and drains and paths of moving bodies like the sun and the moon than to paths of men. Padavī and paddhati have the same significance and refer to ways that grow up when men go along a certain direction, e.g. when they cross a field. They signify traditional paths as well. Though "pada" in Sanskrit means a foot, yet they cannot, in my opinion, be identified with what are technically known as foot-paths nowadays. Padyā and ekapadī are really

मार्ग: अयनं वल मार्गोऽध्वपत्यान: पदवी स्रति: । सरिण: पद्धति: पद्मा वर्त्तनेम्वपदौति च ॥ १५ पुरवर्गम् ।

^{2.} The list given above really contains no words, except padyā and ekapadī, that may have special applicability to the streets of a city. The words that have connotation of this nature are rathyā, vithī and pratolī. Rathyā means a street in which cars, chariots or other conveyance can pass and ply, i. e., a vehicular street. It also means a junction of two roads. Vithī carries two imports: it means a large street lined alongside with rows of houses and buildings; it also signifies a narrow shopping lane, five cubits wide according to Sukrācāryya who would ban it in large cities. Fratolī also carried the same import as rathyā. It seems however that pratolī passes through high gates at the extremities.

roads meant exclusively for pedestrian traffic. It is doubtful, however, if they signified foot-paths fringing large streets. Sukrācāryya sets three cubits as the width of a padyā which, if it really meant foot-paths, was not too disproportionate to fit in with his royal road of sixteen cubits breadth. He however rejects padyās in planning large cities which shows that they are nothing but narrow lanes, so narrow that vehicles cannot pass through them and are, therefore, opposed to rathyā i. e., vehicular street. Ekapadī radically signifies a lane which is wide enough only for passage of one man. It is doubtful whether ekapadī means anything other than a very narrow lane. We therefore fail to fix our finger at a word, among the synonyms signifying a road, which, clearly referring to foot-paths, is capable of laying all our doubts at rest regarding their existence in the old towns of India.

When Śrī Kṛṣṇa caused extensions and replanning of his capital Dvārakā, the improved city possessed eight large streets with sixteen large "catvaras" What does this word 'catvara' here mean? If we conceive two foot-paths on two sides of each thoroughfare, then the eight streets would have sixteen foot-paths. "Catvara" here may therefore be construed to refer to foot-paths, as one of the meanings of the word is a flat plain ground. The word 'catvara' means also an intersection of two roads². This fits in well with the description. For if the eight streets were so arranged that four of them ran parallel in one direction and the four remaining lay in the transverse, then their crossings would also be sixteen in number.

Mayamatam describes the different classes of roads in these lines :-

प्राक्प्रत्यग्गतमार्गा ऋजुद्गडमहापथाख्यास्ते ॥ ३६ मध्यमयुक्ता बीथी ब्रह्माख्या सैव नाभिः स्यात् । द्वारसमैता वीथी राजाख्या च द्विपार्श्वतः ज्ञुद्राः ॥ ३७ सर्व्याः कुट्टिमकाख्या भङ्गळवीथी तथैव रथमार्गम् । तिर्थ्यगद्वारसमैता नाराचपथा इति ख्याताः ॥ ३५ ch. 9.

If the line 74 can be taken with the line following and the underlined parts of the two lines admit of connection and single interpretation³, then there will remain scarcely any room for doubt about the setting of foot-paths alongside the streets

^{1. &}quot;श्रष्टमार्गमहारायां महाषोड्शचलराम्"। Harivamsa, Visnuparva, Ch. 98, 1. 55.

^{2.} चत्वरं स्थात् पर्या श्रेषे स्थाखिलाङ्गनयोरपि। इति हैम:।

^{3.} For a different construction, see my book, Town-planning in Ancient India p. 126.

in ancient India. Under this arrangement, the lines may be rendered as follows: The large, straight like-a-staff streets that lie east to west are called mahāpathas. The street that is linked and connected with (passes through?) the central pada is called brahmavīthī and forms the navel of the street system. The large thoroughfares that are furnished with doors at their extremities are rājavīthī. The small (narrow) paths that lie on both sides of these are all called kuttimakas, literally paved paths. The mangalavīthī (i. e., the auspicious processional street) as well as the other car-streets (rathāmārga) that lie transverse to the former set and are equipped with doors, are known also as nārācapathas. According to this construction, it is evident that the "kuttimakas" cannot but be what we know by foot-paths to-day. This text, however, admits of a different construction as well. As this conclusion depends upon a construction that is not above question and criticism, we do not stand on a firm ground concerning it.

Vṛhat Saṃhitā, Viśvakarmaprakāša, Viśvakarmavidyāprakāša and other treatises on domestic architecture lay down that, outside every house and in front of it there shall be constructed a "vīthikā" as broad as one-third the width of the house. What does this "vīthikā" mean? It is a part of the house (gṛhānga). Does the word refer to the corridor or verandah of a house? Or does it signify a pavement in front of the house lying all along its length? If the answer to the last interrogation be in the affirmative, then it follows that the pavements, in front of houses facing in rows a street, constituting a continuum, will make a foot-path, so that vīthikā may mean a foot-path. The identity in nomenclature of this term with the word "vīthī" which means a large street, should be noted in this connection.

In some works the word vedikā has been used to denote the same thing. Now Mānasāra says that all the streets should be skirted on their both sides with "vedikā". Now this "vedikā" can admit of no other meaning than that of a foot-path³. This can therefore be accepted, without question, as probative evidence of foot-paths.

Haradatta, the distinguished commentator seems to testify to their existence in ancient India in a more conclusive way. Regarding the specific passage that

^{1.} शालाचिभागतुल्या कर्त्तव्या वीथिका विद्वर्भवनात्॥

^{2.} वीधिनां पार्यं योदेशे वेदिकाचीरन्तकतम्।

It should be noted that this term vedik which we have interpreted to denote a foot-path is in name the same word which signified part of a house and which is also identified with vithika, lending additional colour to the view that the last term should be taken to mean a foot-path.

^{3.} Can this word possibly mean a raised seat to serve as an open salon?

should be given to the murderer of a Brāhmin, Āpasthambha directs that this path should lie in the midst in a street. Haradatta, commenting on this passage writes: "Some say that his passage lies midway between the two paths that skirt a large street (rathyā) on its both sides". Here is a clear, unquestionable reference to foot-paths. Haradatta, though he can not be dated to the period of ancient India, certainly flourished centuries before the advent of the English in this country and could not therefore be charged with borrowing his notion of foot-path from the west and with consequently utilising this notion in suggesting the above commentation.

The technical term for "foot-path" in Sanskrit seems to be 'pakṣa' (पत्त). पद्मयुक्ता तु वीथी स्यात् पत्तहीनं तु मार्गकम् । Mānāsara IX, 196.

The road with foot-paths (literally, wings) is called vithi and the road without foot-paths, is margaka.

दित्तणोत्तरस्थं तत् तत्संख्या यथेष्टका पवं वीथिद्विपत्तं स्थान्मध्यस्थैकपत्तम् । M. XI, 350. अन्तर्वीथी चैकपत्ता बाह्यवीथी द्विपत्तका । M. IX, 396. मुख्या वीथी द्विपत्ता स्थाद्। M. IX, 104.

The north-south streets should be as many as necessary. These streets should have two foot-paths on both sides, the intervening streets should have only one foot-path (on one side). The intervening streets should have fo side, while the thoroughfares surrounding the wards should have foot sides. The main streets should be double-winged, i.e., should have on both sides.

I have not however comes across any evidence in support of the existence of foot-paths in the reports of archaeological survey or in the traveller's accounts. Literary evidence seems, nevertheless, to be conclusive about it.

^{1.} तस्य पत्या अन्तरा वर्त्स नि । Āpesthambha Dharmasūtra, Praśna I, Paṭala 9. Khandika 24, Sūtra 12.

^{2.} अपर आह, यत रथादी उभयो: पार्श्व योर्वर्मा नी भवतः, तत तयोर्मध्ये सुतकरादिपथेन सञ्चरितित

SOME IRANO-HELLENISTIC, INDIAN AND EASTERN ASIATIC ELEMENTS IN THE ART OF THE GREAT MIGRATION IN HUNGARY

By ZOLTÁN DE TAKÁCS.

Some years after the beginning of my studies in Eastern Asiatic arts, about the year 1910, I was obliged to give expression to my conviction that some motifs of the art of the Great Migration in Hungary must have had their source in the Far East, both in the region of the Iranian and Indian and in that of the Chinese cultural area. Many of my observations I published (in several reviews), many remained unpublished, as I was sometimes interrupted in my studies and the material I needed was not always accessible to me.

But nevertheless I was able to solve the main questions in which I was interested. My object was to indicate the art motifs which the migrating people brought to Hungary, from the Far East and on the basis of the recognition of these art motifs to fix the date of their migration and the nationality of their bearers.

Thus the Hungary of the Dark Ages was, I venture to maintain, linked with the Hellenized Iran of the Parthians and Eastern Turkestan and through them with the Chinese cultural area. The mediators between this region of the Far East and Hungary of the migration period were naturally not only Iranians, but also Huns. We have objects which bear proof of being first-hand importations. Now, according to the aim I have in view, I will quote only such proofs as can instruct us about a similar Iranization of the Hungary of the Huns and the East of about the same time.¹

In the Francis Hopp Museum in Budapest there is a small bronze girdle ornament from the Ordos territory, a plaque representing a lion's head, framed with beads. (Pl. IX. Fig. I). Each of the three corners of this frame is accentuated by

^{1.} A number of photographs was kindly placed at my disposal by N. Fettich, K. Sebestyen and late F. Mora. Besides I have to thank E. Jonas for his kind assistance in numismatic matters.

one hollowed bead which is larger in size. Rows of beads are very characteristic motifs of ancient Indian and Persian art. Similar girdle ornaments are to be found in great quantities both in the Far East [Mongolia and the Ordos territory] and in Hungary.¹

I publish here as a further analogy a bronze girdle ornament in a different shape though in the same style from Hungary (Pl. IX. Fig. 2), on which we see a griffin with the wing formed in Sasanian style. This plaque has a square frame consisting also of beads with a larger and hollowed one at each corner.

Related types are from the oasis near Khotan in Eastern Turkestan, the terracotta lion's heads framed with manes transformed as beads, published by Sir Aurel Stein in his Ancient Khotan² and other ones presented by Sir George Macartney to the Museum fuer Voelkerkunde in Berlin³ and the bronze lion's heads, set equally in frames of beads, from Northern China (Pl. IX. Fig. 3), presented by Mr. Geza Szabo to the Francis Hopp Museum.

It may be mentioned that the very often applied animal symbol of both Persian and Indian Art, the lion-griffin, plays only a limited part in the store of art symbols of Hungary of the migration period. Just as the eagle-griffin in China, it is to be seen only exceptionally in its complete form on the finds from Hungary. It is usually found on the top of girdle pendants and only in fragments, often in a shape which can also be interpreted to be a dragon. Girdle pendants of such a kind are crowned with two lion's or dragon's heads confronted with each other (Fig. 4) and sometimes horned (Fig. 5). But I think that I am not going too far in the differentiation of motifs if I see in some of these horned lion's or dragon's heads not the first-hand adaptation of Indo-Persian art, but the influence of the modified Chinese form of it brought back to the West by the Huns. I hold this opinion on account of two peculiarities, viz. the ribbon-like curved shaping of the mouth and the twofold, first backwards and then forwards bent horn, peculiarities very often met with on monsters represented in the art of the Chinese Han period⁵. Sometime we find girdle pendants crowned with clearly recognisable dragon's heads (Fig. 6). This is one more point of evidence that here we have to do with motifs of Chinese origin.

I hope to be able to publish also Mongolian and Ordos analogies as Professor Andersson promised to give
me some material from the Museum of Far Eastern Antiquities in Stockholm.

^{2.} Sir Aurel Stein, Ancient Khotan, Vol. II, Pl. XLIV, Y, 0015, Terracotta from Yotkan.

^{3.} A. v. Lecoq, Bilderatlas zur Kunst u. Kulturgeschichte Mittelasiens, Fig. 206.

^{4.} Stein, op. cit. Vol. II, Pl. LXX, N. XII, 3, Side; leg of chair, wood carving from Niya Site.

^{5.} Stein, Innermost Asia, Vol. III, Pl. LXXXIV, Ast. 1, 5, a oi, c; Figured silk fabric from Astana Cemetery.



But most of the symbols occurring on the bronzes from Hungary are of Irano-Hellenistic origin, pointing rather to Western than to Eastern Asia.

Much has been written about the importance of Asiatic Hellenism. We have witnessed a campaign from two extremely different standpoints. On the one side Professor Joseph Strzygowski with his oriental theory, on the other side Alois Riegl, the chief adherent of the importance of the "late Roman" art and the school of Berlin, v. Lecoq and Albert Gruenwedel, with their eyes on the immense influence of Asiatic Hellenism on the whole Orient and even on the Far East. The question of Hellenism is also now worth a profound study. It is commonly held that Hellenism is Orientalized Hellenic culture. I think it is no mere pun to say that for Asia on the contrary it is Westernized Orientalism, the addition of Western activity to Eastern tenacity and this became an everlasting current. I venture to call Asiatic, i.e., Iranian Hellenism a great Oriental Renaissance, with the aid of the West, but to the advantage of the East.

From the objects which I publish here the original of Fig. I must be the oldest. The lineament of it represents the style of the later Han-period. The one published as Fig. 3 seems to me to be of later date, but earlier than the specimen from Yotkan¹ which is certainly from the T'ang period. All of these Gorgon-like lion's heads are of Indo-Persian origin.

Irano-Hellenistic art objects occur in Hungary in the cemeteries of the period which I call Turanian, for it had begun with the movements started by the successive invasions of the Huns. These cemeteries mostly contain monuments of a mixed culture which was previously styled "Keszthelykultur". I call it Turanian. It is rooted partly in the Greco-Sarmatian, partly in the Helleno-Iranian civilisation with the admixture of Indian and Eastern Asiatic elements. On the basis of some finds of Roman coins (coins of the Emperors from Faustina, died in 170 A.D., to Valentinianus, died in 392), the oldest monuments of this Turanian culture can be dated from the Sarmatian period immediately preceding the Hunnish conquest, the youngest ones from the Avar period. The whole bulk has recently commonly been labelled as Avaric. I am, however, firmly convinced that this name is wrong. The chief disseminators of these products I suppose have been some Iranians, probably some clans of the Alans, who had also played a part in Hungary before the Huns, that is to say such elements as are called Sarmatians by the historians of Constantine the Great and were settled by this emperor in Southern Hungary and the Illyrian

^{1.} See Note 2, p. 18.

province. The great number of these sepulchral finds as well as other circumstances considered by Joseph Hampel¹ and other investigators as Geza Nagy, lead us to the view that they were by no means witnesses only of the empire of the Huns or of that of the Avars.

May I now make some further remarks in order to support my theory that the Turanian art of the migration period in present Hungary is rooted also in Indo-Iranian Hellenism and that in Hungary this art was already existent in the first half of the fourth century.

Valuable proofs of this are girdle-ornaments with the figures of two Roman emperors facing each other (Figs. 6-8). They are represented (sometimes as sceptre-holders) in the portraits of Constantine II and Crispus ornamenting a coin (Fig. 9), minted by Constantine the Great in Sirmium certainly before 327, i.e., the date of the assassination of Crispus. The same composition also ornaments a buckle (Fig. 7) found in a grave at Ballagito-Kundomb not far from Szeged, Southern Hungary, a girdle-pendant from the same grave (Fig. 6), and another similar girdle-pendant from Southwestern Hungary, from the County Tolna, which is now in the Hungarian National Museum in Budapest. On another bronze girdle-pendant (Fig. 8) from Nemesvoelgy, Western Hungary, which is also in the Hungarian National Museum, we see the two heads confronted with and nearly touching each other. The make of this piece is very coarse: it is evidently a variation of the type quoted above.

All these girdle-pendants are ornamented with twists of ropes or rows of pearls intertwined not only with double heads but also with single ones, each having a sceptre. Similar kinds of twists are to be seen not only on Roman ornaments, but also on carved wooden beams found by Sir Aurel Stein in Lou-L'an.²

The chief patterns of these ornamental carvings are chains. They consist of alternate larger and smaller links. Parts of such chains are to be seen on the girdle-pendants from Hungary, attached on both sides to the smaller links of the twists thus filling also the space between the larger links.

I can also refer to a girdle-pendant (Fig. 10) in gilt bronze from Western Hungary (in the collection of Mr. Joseph Fleissig, Budapest) with busts of very coarse mould placed in the sinuosities instead of the twists of a scroll.³ This composition recalls the famous wall-painting from Miran discovered by Sir Aurel

^{1.} Altertuemer des fruehen Mittlalters in Ungarn (1905) I, pp. 17-23.

^{2.} Stein, On Ancient Central Asian Tracks, Pl. 62, Nos. 1 or 10.

^{3.} There seems to be the head of an elephant within the first scroll. The main motif of the scroll in this case is of Indian origin. Ed.

Stein representing crowned heads in garlands¹ and the clay-tablet from Afrasiyāb² with a coarse wavy garland combined with human heads.

I cannot but connect the Hellenistic motifs of the series of heads on the girdle-pendants from Hungary with an arch in Hatra, ornamented with heads and the remnant of a small Gandhāra stūpa (Fig. 12) presented to the Francis Hopp Museum in Budapest by Mr. Imre Schwaiger, Delhi, with a row of busts of men forming consoles; each of the busts is to be seen with one hand making a gesture. These gestures recall the bust on the seal of the tablets with Kharoṣṭhī-inscriptions discovered by Sir Aurel Stein near the Niya river.³ This seal is also in Hellenistic style whereas its inscription is Chinese. Sir Aurel Stein's finds have been always treated as sensational, because they combine remains of three different cultures.

Not unlike these is the girdle-pendant (Fig. 6) which has a frame consisting of Indo-Persian beads and on the top of which are two dragon-heads in Chinese style.

Smaller disc-shaped bronze-girdle ornaments, adorned with a diademed man's bust in sideview (Figs. IIa-d), are numerous among the Turanian relics of the migration period in Hungary. The persons represented on these ornaments hold a flower-like object, always of a very coarse make. As this motif belongs to the oldest and most common in Oriental art, there is no need to expatiate upon this subject. But it is worth mentioning that kings of the Kuṣāṇa dynasty are also represented on coins with similarly shaped objects, clubs, flowers or spikes in their hands. Doubtless, the invaders of present day Hungary brought from their former Eastern home the custom of representing a prominent person (a ruler?) with a symbol of power or adoration. Among the discs with one head there is a type with covered mouth (Fig. IId). These might have been representations of Persian warriors.

The duplication of the motif seems to be a Roman modification of the original Oriental motif. Coins with the heads of two Roman emperors were minted also by kings of the Pontus and Bosporus. But on these coins we see only the head (as on the Roman coin Fig. 9) without the hands holding the sceptre or the club. The two busts with the sceptre on the girdle-pendants are evidently figures of Constantine II and Crispus, because the sceptres on the pieces in question are bent not unlike a boomerang. This might be a roughly drawn indication of the eagles which ornament the Roman sceptres.

^{1.} Stein, ibid, Pl. 57.

^{2.} Stein, Ancient Khotan, Vol. II. Pl. LXXXVIII, S. 001.

^{3.} Ibid. Vol. II. Pl. LXXII, N. XV, 167.

ILLUSTRATIONS

- 1. Bronze belt ornament from the Ordos territory. Francis Hopp Museum, Budapest.
- 2. Bronze belt ornament from Hungary. Francis Hopp Museum, Budapest.
- 3. Gilt bronze ornaments from Northern China. Francis Hopp Museum, Budapest.
- 4. Bronze girdle pendant from Hungary.
- 5. Bronze girdle pendant from Hungary.
- 6. Bronze girdle pendant from Hungary. (Ballagito-Kundomb near Szeged.) Municipal Museum, Szeged.
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- 9. Roman coin with the heads of Constantine II and Crispus.
- 10. Gilt bronze girdle pendant from Hungary. Coll. Joseph Fleissig, Budapest.
- 11. Bronze belt-ornaments from Hungary. (a-b. Mosonyszentjanos; c-d, Csuny.) a-b, Hungarian National Museum. c-d, Museum, Magyarovar. After Fettich.
- 12. Fragment of stūpa in Gandhāra style. (Svāt Valley ?) Francis Hopp Museum, Budapest.



NĀGARA, VESARA, DRĀVIDA, ETC.

By S. KRISHNASWAMI AIYANGAR.

These are technical terms applied as a rule to classes of architectural and sculptural works. In their general application, they are usually taken to imply Northern, Dakhan, and South Indian styles generally. Other groups are occasionally referred to, and of these the most remarkable are Varāti, Kālingi, and even Pāncāli. Varāti, of course, would ordinarily be derived from Varāḍ (Barar), Kālingi, from Kālinga, and Pāncāli, similarly, from the Pāncāļa. These again are usually combined with another term Sarvadesika, common to all the Desas or divisions of the country. The use of the last term in contrast with the others by itself would indicate that the differences are fundamentally according to the Desa or region, in which the particular style prevails as the dominant style of the locality. These distinctions are made to apply not only to buildings ordinary, Grha or Vāstu, and palatial, Prāsāda, but also to the constituent parts of these buildings. Nay more, it is carried even to apply to the Linga in the sanctum as well as to the images of various kinds used as decorations on walls, pillars, etc. The distinction is again carried through both in regard to the walls and even pillars, to the same minutiæ of detail as in the case of the buildings or structures as a The divisions therefore seem fundamental to all works of art, that of the mason in particular, and seem definitely to be based upon localities primarily. Localities differ according to the character of the soil, the nature of the flora that grows from out of the soil and the characteristic qualities (gunas) that they produce, and coming round again therefore to the features peculiar to large areas or regions of the country. On this basis, therefore, the primary division is Nagara, India north of the Vindhyas, Vesara, India between the Vindhyas and the Krishna, corresponding to the Dakhan of secular history, and Drāvida or India south of the Krishna, corresponding to Tamil India.

It may be admitted without question that the derivation of the words Nāgara and Vesara is not as clear as Drāvida, Kālinga and even Varāta. But to infer from

this that they had no territorial significance would be to argue too much, in the face of the explicit statement by text writers. Whatever the derivation of these words, which we shall for the present have to leave unsettled, they are undoubtedly technical terms, and text books bearing on the subject must be regarded as authority for the significance of these technical terms. Our derivation may fail or may prove satisfactory. But that is something entirely different from what the artist or the craftsman understood by the terms. These are not the only two terms of architecture or iconography that require illumination. There are various others in similar familiar use. Their significance can be understood by reference to authoritative books. But their derivation is still unknown, at least so far as we are concerned. The terms Pindi and Bheram are examples from among a triplet Lingam, Pindi, Bheram. Of course from the context we could make out Lingam as the symbolical representation of Siva, Pindi as the Pita or the pedestal on which it is placed, and Bheram is the whole figure of a shapen image. The term Nagara figures only in association with the Nagari script, but even in association with women of a class, according to the Kāmasūtra of Vātsyāyana.1

While these topics are discussed both in the Silparatna and the Mayamata published in the Trivandrum Archaeological Series, as also in various other works, Agamaic, architectural or other, still we have chosen the text from the Kāmika Agama, because that is quoted as authority by other works referred to above, and because it devotes a whole chapter to the elucidation of these fundamental terms, the number of the chapter being 49, and the heading Nāgarādī Vibheda Paṭalam. The chapter is obviously intended to explain the difference between the terms, Nāgara etc.

For the purposes of this classification, the country is divided into three parts southwards from the Himalayas, the Vindhyas and the Krishna forming the two boundaries. This division is taken to be based upon the three well-known qualities, Sattva, Rajas, and Tamas, of the earth in these parts. A fourth class in addition to Nāgara, Vesara and Drāvida is called Sārvadesika as having features common to

^{1.} But in regard to Vesara, from Vesya, Mr. Jayaswal, J. I. S. O. A., Vol I, No I. p. 57, has little authority to rest on, as his quotation from the Silparatna fails to be of authority altogether. The passage Silparatna I. Ch. XVI. 50 (Trivandrum Sanskr. Series LXXV) which he refers to where the term Vesya occurs, and which he interprets as the equivalent of ornamental, contains an obvious misreading. The term in use there being Vaisya, one of the top strokes being missed perhaps by the scribe who made the manuscript copy from which the work is actually printed. That it is Vaisya is unmistakable, not only by parallel references elsewhere, but the very śloka which refers to classes of buildings connected with Brahmana and Kşatriya. The next following division must be Vaisya and not Vesya. In our present state of knowledge therefore, and, notwithstanding the fact that we do not know enough of the nature of these technical terms and their derivation, we should be well advised still to follow authority.

all these distinct divisions, thereby indicating clearly that the division is regional primarily. Two other divisions are quoted, such as Kālinga and Varāṭa, which obviously are again territorial. Then it is laid down that the buildings of the Nāgara class ought to be built on land where the Sāttvika quality predominates, Vesara where the dominent quality is Tamas, and Drāviḍa where Rajas predominates, the Sārvadesika buildings being common to all. The other two classes Kālinga and Varāṭa are built where the two guṇas, Sattva and Rajas are found to prevail together, and perhaps in an equal degree.

Proceeding to buildings generally of an architectural character, such as ordinary residential buildings, palaces and temples, they contain features which fall into eight divisions: namely, (1) Mülam (the base), (2) Masükaram (the plinth over it), (3) then comes Jangha (torso), (4) then Kapotam or Sikharam, (5) Galam (neck); above these (6) Amalasara surmounted by the (7) Kumbha (pot) or The distinction between the classes of buildings depends (8) Sūlam (finial). upon the variations in the disposition of these eight parts, and the different kinds of ornamentation. Nagara buildings may have other finials than those indicated. They must have the eight component parts, must be decorated with pairs of cars, set at the angles against each other. The Bhadrakas (portico-mouldings?) must be rising one above the other, must exhibit angles, in three, five, seven, or nine tiers, with projecting eves with a series of cavettoes for birds, ornamented in either part with steps upwards from Prastara (entablature) to Prastara, provided with Tha (moulding) and Pratyuha with dome-like turrets, either in singles or in pairs, with decorative work or without, and set with round Amalasara. They should also be provided with the halls called Sukhanāsi (vestibule) both in front and back as well as on the sides, which may also be shown with the subordinate parts. These decorative features may be varied according to the skill of the architect, and to subserve the demands of good appearance. Such a building is of the Nagara type.

Where the building exhibits a well formed plinth over the base, with decorative work alike on the pillars and the walls intervening between pillars set apart at equal distances, and divided into parts in good symmetry, and showing distinctly the first eight parts, the building is of the Drāviḍa type. The Bhadrakas (porticoes) in these building ought to be set at the angles, outside the prescribed measurement. The intervals between pillars must be equal and the intervals between Prastaras (entablatures) must be built up. They should have pipes for running out the water, with statuettes in the intervals, decorated with garlands and carrying planks for setting the beads on. The edges must provide cavettoes. They must have the main entrance,

Brahmadvāra, with flags leading into the vestibule-hall (Sukhanāsi) provided also with a hall at the back, the larger sized ones falling into thirteen divisions and the smaller into twelve. They may have six or seven floors. They may be divided into fifteen or twenty one parts. Similarly these structures may be built with even eight or nine floors in houses. Other structures may have nine, sixteen, seventeen and even eighteen parts, with the usual six different forms, each part adorned with decorative work. These might also contain emerging from the middle of the decorated tower (Vimāna), miniature structures of a similar kind: Buildings which in this wise are ornamented in the Vimāna are regarded as Drāviḍa, structures of the Drāviḍian class.

Where the setting is Drāviḍa with decorative work of the Nāgara kind, and otherwise containing features peculiar to Nāgara or Drāviḍa structures, with the roof either divided in parts or being undivided, the upper structures diminishing in size as they rise, buildings of this kind with the Vimānas decorated in this wise, are called Vesara. Where from the base buildings can be raised in series one above the other, in which the pillars are decorated with portico-mouldings carrying above these suitable neck, dome and spire; the different parts of which are suitably decorated with Bhadrakas, the interspaces as well being filled with decorative work; in which even the pillars which are set on the floor are of the form of statues, the decorative work being arranged in line, the eves projecting from the Prastara so as to cast a shadow; such buildings so decorated are described as of the Varāṭa class.

Without supporting arches or statues, decorated with flags on the outside, provided with subordinate arches or statues under the beam and decorated with members standing erect or in postures of flexion, all the parts alike covered with decorative work, being either square or octagonal with both neck and dome, buildings such as these are regarded as of the Kālinga variety. Buildings provided with water pipes and decorative arches, or statues ornamented with garlands on the neck, provided with dovecots, the main entrance bedecked with flags, falling into six classes in respect of form, buildings such as these constitute the class called Sārvadešika. Nāgara buildings ought not to show broken sides which must be equal. They must conform to the measurements prescribed, while in Drāviḍa buildings, the defects in the sides are made up by the provision of decorative Bhadrakas. Buildings of the Vesara class should be without shortage or excess of the prescribed measurements; must be provided with front portals and must rise in tiers one above the other marked by cross beams.

^{1.} The eight divisions mentioned above less the base or pedestal, and the finial or spire.

One other feature deserves mention, namely the general shape. In some cases, the variation of shape applies to the whole building beginning with the base and running consistently through all the parts to the finial. In some cases, this is prescribed only for the upper part, the Vimāna, etc. In the Nāgara class, it is the square form that is prescribed. In the Dravida, it is the octagonal shape usually, the hexagonal being permissible also. While in the Vesara, the form is circular, at least curvilinear if it is not exactly circular. The whole building from top to bottom ought to be square in Nagara. In the Dravida this formation applies only to the structure above the ground floor. These characteristics of the different styles are again maintained consistenly through the subordinate parts. These subordinate parts have to show six out of the eight features, with which we began, the six being those omitting the first, or the base and the last, or the finial, out of the eight given. This consistency of form is insisted on not merely in respect of whole structures or buildings, but is held to apply with the same consistency to parts, such as the Vimāna, etc. Furthermore it is held to apply, as far as may be, not merely to the forms of God installed in the sanctum whatever the actual form be. One will notice this in the shape of the linga of the Rajasinha type in Mamallapuram. It falls into three parts; square below the ground level and above to a certain height; octagonal above this through the greater parts; and circular at the top, somewhat less in length than the octagonal part. These are described respectively as Brahma, Visnu and Siva, a Payranic classification adopted also in the Agama literature for architectural and other purposes as well. But even in regard to the statues forming part of the decorations of these buildings, the whole of these various divisions is described in Chapter 49 of the Kāmika Āgama.²

^{1.} Mayamatam, Ch. 19.

^{2.} See also Silparatna.

THE PAINTED SARAS OF RURAL BENGAL

By G. S. DUT,T, I. C. S.

between art and ritual is furnished by the painted earthen Sarās or covers which are in extensive use in rural Bengal even at the present day among Hindu women of all classes on the occasion of the annual harvest festival which is known as the Lakṣmi pūjā. Lakṣmi is the goddess of plenty and is therefore dearly beloved of Hindu women of Bengal as the goddess of the harvest. Her special abode is the detached paddy granary, of a circular shape, which forms an integral part of every Bengali

A very interesting example of the close connection

village home. On a full moon day in autumn in every year the goddess is worshipped by the women in every Hindu home in the villages of Bengal with a great deal of simple ceremony. One integral part of the ritual consists in the use of the painted earthen covers or Sarās referred to above. These Sarās are generally painted by the men of the potter caste assisted by their womenfolk. On each Sarā there is invariably a representation of the goddess Lakṣmī who usually has two female attendants, one on each side and there is usually also a representation of a comb symbolical of her toilet and of an ear of paddy in each of her hands symbolical of a plentiful harvest. But the most interesting symbol is the mount on which the goddess rides. This is an owl, the watchful night-bird with vigilant eyes which carries on a ceaseless warfare againt the rats and other vermin which commit depredations on the paddy granaries and by killing which the owl has acquired the high privilege of being the mount of the goddess.



Besides the goddess, her mount and two female attendants the covers often contain representations of Kṛṣṇa and Rādhā who are the most popular deities in Hindu Bengal and often the representations of these latter deities are given the more prominent place, Lakṣmī and her attendants taking a subordinate place at the bottom. This is evinced by the larger of the two Sarās (Pl. X) from my collection. In the smaller of the two Sarās Lakṣmī is represented as sitting face to face with her divine spouse, the god Viṣṇu; and both are shown as riding on the back of the owl (inset on p. 28).

Both the Sarās are contemporary productions, the larger one (Pl. X) having been procured from the village Nalia in the district of Faridpur and the smaller one (p. 28) from the village Senhati in the Khulna district. The covers are round and saucer-shaped without any base but with a turned-up rim. The concave side is always left bare and the painting is always on the convex side.

The hereditary talent of the village potters of Bengal is revealed by the manner in which the lines, the structure and inclination of the figures have been adapted to the curvature of the surface of the cover. This is particularly shown in the strikingly sweeping curves with which the pattern of the eye brows and wings of the owl has been brought out in the smaller of the Sarās (p. 28). The colour scheme in the large Sarā (Pl. X) which is 16 inches in diameter, is as follows: ground yellow, trees red, Kṛṣṇa's upper body, hand and face blue; legs yellow; Rādhā's body yellow, dress red. Of the two attendants: body, yellow; gown red; and the front stripes of the sārī blue and yellow. The rings round the rim and the bands in the middle are in alternate sweeps of red, blue and black. In the smaller Sarā which is 10 inches in diameter, the ground is red; Viṣṇu's body blue and Lakṣmī's yellow; Viṣṇu's dress in yellow stripes and Rādhā's in blue stripes, the intervening band in yellow. The crossed circles are yellow. The rim is painted red with radiating yellow bands. The sweep of the eye brow and wings of the owl is black, yellow and red.

After the pūjā ceremony is over the Sarās are hung up on the wall with a string passed through two holes at the top. They form a wall decoration in all Hindu homes in rural Bengal.

PERIYAPURĀNA SCENES IN DĀRĀSURAM TEMPLE

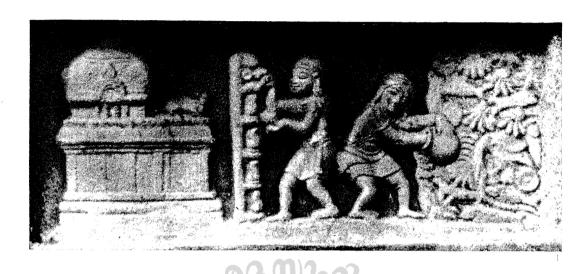
By P. V. JAGADISA AYYAR.

Dārāsuram, a station on the Madras-Daņushkodi main line of the South Indian Railway is almost a south-eastern suburb of Kumbakoṇam city, near which stood a palace of the later Cola kings. The locality where the palace stood goes by the name Solamāligai, which in Tamil means the palace of the Colas. Occasional diggings for foundations of buildings etc. are said to bring forth traces of past structures.

The temple here is dedicated to Siva and the linga in the sanctum is huge as well as the tower over it. All that remains of the courts which surrounded the present buildings, are the remains of the gopuras of some outer courts. The tank in front is almost a square of nearly 250 feet width, getting its supply of water from the river Kāverī, flowing at a short distance. The bali-pīṭha (seat where offerings are placed to propitiate the gods) on a raised platform, is located by the side of the flag-staff where worshippers of the temple prostrate before entering the inner court. There is a sculpture of a gate-keeper on the right of the entrance leading to the inner court, which is said to have been brought from Kalyāṇapuram in the Bombay Presidency by the Cola king Rājādhirāja I (1018-1052 A. D.) in token of his victory over the Cālukyas, who had their capital there. The maṇḍapa in front of the main shrine, resembling a chariot with stone wheels and horses on sides, has interesting scenes from Saivite Purāṇas.

In the belt of the wall surrounding the sanctum are in relief scenes from the life-history of Saiva devotees of Periyapurāṇa divided into various sections. The labels relating to the incidents are inscribed over the sculptures in Tamil characters. Unlike the other Purāṇas, the Periyapurāṇa is the only work in Tamil literature that records the lives of the historical personages that revived Saivism after it fell a prey to Jainism and Buddhism in South India. The Saivites recite this work in the early morning like the Rāmāyaṇa, Gīta etc. The personages dealt with therein are men and

^{1.} See E. B. Havell, The Ancient and Medieval Architecture of India, Pl. LXXX.









women of all castes and creeds. They withstood all trials and on giving sufficient proof of their faith they were raised to the rank of Saiva devotees. Their figures are installed on the inner side of the covered raised verandah of the court-wall next to the sanctum. Besides the daily worship, festivals to them are conducted on the days they left this mundane world. This is the only temple with sculptural representations of the events connected with the lives of Saiva devotees with the names engraved over the scenes.

The god in the temple is named Airāvatesvara, though in inscriptions he is named Rājarājesvaramudaiyār and the place as Rājarājapuram and Dārāsuram. Evidently the Cola King Rājarāja I (1146-72 A. D.) who constructed temples, palaces etc., also built this temple. This finds further support from the fact that one of the halls in the temple is named after a title of this king as "Rājagambhīram mandapam".

ILLUSTRATIONS.

Pl. XI. Fig. 1. Naminandyadigal. At a place called Emapperur in the Cola kingdom there lived a Brāhman devotee of Isvara named Naminandi Adigal. He used to go to Tiruvārur daily and worship the deity there. One day a deep desire to light a large number of lamps everywhere in the temple took hold of him. So he unwittingly entered the house of a "Samana" (Buddhist) and asked some ghee for the purpose. He got in reply a curt 'you may use water in place of ghee' from the inmate of the house.

Disappointed and dejected, he went back to the temple and prayed fervently to Isvara. Then a voice from space told him to make use of water in place of ghee saying that it would burn and he did so accordingly. To his intense wonder and delight the lamps formed of baked clay cups filled with water burned beautifully and from that day forward he used to keep a large number of lamps burning in the temple throughout the night.

This act of Naminandi undermined the prestige of the "Samanas" there. Coming to know of this the Cola king made him the manager of the temple affairs in which capacity he acquitted himself wonderfully.

Pl. XI. Fig. 2. Kotpuli Nāyanār. Once upon a time, there lived in Nāttiyattānkudi in the Coļa country a devotee of Šiva named Kotpuli Nāyanār. He belonged to the Vellala community and was the commander-in-chief of the royal army. What he got as remuneration for his services from the royal treasury, he was in the habit of spending in the services of Iśvara and this was going on for a considerable length of time. One day he received orders from the king to proceed forthwith on an expedition. Considering that he might be absent for a long time, he arranged to add a large quantity of grain to the stock on hand so that it might not be wanting to carry on the work of service to Iśvara by feeding a large number of his devotees every day during his absence. After having given strict injunction to his relatives not to appropriate any portion of it under any circumstances, he departed with his army.

Shortly after his departure a great famine visited the country and the people died by hundreds. The king's relatives suffering from the pangs of hunger resolved to appropriate the corn stored by the king and to make good the quantity taken even before his return. No sooner it was thought than it was carried into effect and the paddy in the king's granary was soon converted into rice and disposed of rapidly. Meanwhile, having vanquished his foes Kotpuli Nāyanār returned home with immense wealth which was his share of the spoil from the enemy's countries. Learning how the grain stored for the service of Isvara had gone, he blazed in anger. Closing the egress from his palace, he killed all those of his relatives including father, mother, wife and children, who had partaken of the food obtained from the stored up grain. Even a suckling child, the only surviving one, in a family was not spared, since the milk it subsisted on was from the food taken by its mother out of Siva's grain.

Isvara was greatly pleased with his absolute devotion to him and raised him along with the relatives he had slain to the regions of bliss.

Pl. XII. Fig. 1. Relief panel in between Periyapurana scenes. See also Pl. XII. Fig. 2.

Pl. XII. Fig. 2 refers to Aludaiyyapillayar (Sambandhar).

SCULPTURES AND BRONZES FROM PAGAN

BY NIHARRANJAN RAY.

The temples of Pagan¹ "are among the noblest monuments in Indo-China, and they are the one positive contribution Burma has made to humanity." To-day one can see how the builders of these temples, those vainglorious kings and tyrants, tried to attain a historical immortality in tens and hundreds of these monuments,

^{1.} Pagan, the classical seat of ancient Burmese monarchy, became the capital of Burma from the middle of the eleventh century A.D. when Anawrahta conquered Thaton, the capital of the Talaings in Lower Burma, in 1054 A.D. From that time onward up till the sack of Pagan by the Tartar hordes of Kublai Khan in 1283 A.D., and the consequent extinction of the dynasty the royal capital was a centre of great artistic and architectural activities. But it must not be assumed that Pagan, before the accession to the throne of Anawrahta, was a barren city without any artistic or architectural activities or any outside intercourse. The contrary is rather shown by historical and archæological finds. It is true that the chiefs of Pagan who preceded the dynasty of Anawrahta had neither the wealth nor the power of their successors, and it did not fall to their lot to make of Pagan the great city that she became after the conquest of Thaton. But the fact that Pyinbya, as early as 849 A.D., considered it necessary to fortify the city with a strong wall and a strong gate that encircle a large area of the ruined city is significant; and it can be assumed that the city had already by the time of Pyinbya, who is described in the local chronicles as the 33rd king of the Pagan dynasty, grown to considerable importance. The dynasty, as asserted by the chronicles, had already been ruling there for several centuries and the country had naturally opened up intercourse with the neighbouring countries, at least with the Eastern provinces of India and Southern China. As for relations with Eastern India, evidences are too many to leave any room for doubt. Mahāyānism and Mahāyānist Tantrikism which had already been the religion of a considerable section of the people must have been introduced into the country decades before Anawrahta strove successfully to make Theravada Buddhism the religion of the state and the people. (Harvey, History of Burma, p. 17; Ray, "A Note on Bodhisattva Lokanātha and other Mahāyāna Gods in Burma," Budddhistic Studies Vol. 1; Brahmanical Gods in Burma, pp. 3 and 13: Duroiselle, "The Aris of Burma and Mahāyāna Buddhism," A. R. A. S. I. 1915-16.). The discovery of a number of terracotta votive tablets with effigies of the Buddha that can stylistically be dated earlier than the 11th century, and with Sanskrit inscriptions in eastern Nagari characters, palaeographically dated in the 9th and 10th centuries, also point to the same conclusion. (Recent discoveries have proved that Sanskrit was known in the royal capital some centuries earlier, 'at least as the language of the Indian court-astronomers, and perhaps also as the classical language of the Southern Buddhist sect whose canon was Sanskritical, An. R. A. S. I., 1926 27, p. 161ff.) And one or two fragments of stone images discovered from amidst the debris of the ruins of the old city can also stylistically be ascribed to the pre-Anawrahta period. It is moreover easy to visualise the numerous temples, of gods of different pantheons, that must have stood there before the Shwezigon (1059) or the Ananda (1090) or the Thatbinnyu (1144). In fact thse monuments presuppose a local building and architectural activity of at least two or three centuries.

^{2.} Harvey, op. cit. p. 59.

more or less in ruins, and spread over an area of hundred square miles. From amidst the debris of scattered ruins, as well as from the niches and corridors of the comparatively well-preserved edifices, have been picked up a large number of sculptures. They afford an interesting study in Hindu and Buddhist iconography, primarily Buddhist; but they are more interesting from the point of view of the vicissitudes of Indian sculptural art outside its natural boundaries. The most representative collection of the stone sculptures of Pagan can be found in the niches of the central obelisk and the outer walls of the Nat-hlaung Kyaung, the only ancient Brahmanical temple now existing in Burma, and in the large number of niches and corridors of the celebrated Ananda temple, built by the great Buddhist king of Burma, Kyanzittha, (1084-1112), son of Anawrahta. Besides these, there are smaller groups in other temples as well, for example, in the Shwezigon, the Ptilo-minlo, the two Seinnyet temples, the Patothamya, the Kyaubaukkyi and a few others. Stray examples from among the scattered ruins of the city have been gathered in the small museum at Pagan built near the Ananda temple. But all these scattered groups reduce themselves to such characteristic types with regard to style, appearance and iconography, that they may roughly be considered to have their best representatives in the large collection of the Ananda temple. Of extant examples in bronze we have but few examples. The majority of them, miniature in size, are at present in the Ananda Museum, Pagan. Only about half a dozen can still be found in situ, as for example, the four colossal standing images of the Buddha sheltered in the niches facing the four cardinal points of the famous Shwezigon temple, and another of similar description in a chapel within the precincts of the Ananda Kyaung daik.

The majority of them belong undoubtedly to the Pagan dynasty, i. e., from the middle of the eleventh century to the end of the thirteenth; but in the absence of even a single dated image one has to fall back upon a stylistic consideration of the sculptures themselves; but this even, in the case of the Pagan sculptures, is a precarious procedure to depend upon. The art of Pagan during this period was the direct product of the court which patronised, as we shall see later on, an imported art-tradition. The art of the people which must have existed from very early times seems to have been silenced by the imported tradition; but this was only temporarily, for the indigenous art-tradition seems to have slowly but gradually begun to re-assert itself; traces of this are already visible by about the end of the eleventh century till it transformed the imported art-tradition at the same time being itself, no doubt, influenced by it. Any definite chronological sequence cannot be established, but three more or less definite stages in the

process of the development of the art of Pagan during this period can be traced, one stage overlapping to a certain extent on the next.

Geographically the art of the Pagan dynasty is practically limited to Pagan itself though the Pagan empire had gradually expanded from a chieftainship to a wide dominion covering almost the entire peninsula up the gulf of Martaban. The art of Pagan was, as already pointed out, a direct product of the court, and the imported art-tradition patronised by the court was mainly centred in the capital city. Some of the kings of the dynasty, it is true, built temples at Minbu, Shwebo, Mandalay, and other places in the Myingyan, Pakokku, Thayetmyo and other districts, and even in the Shan States, but sculptures were hardly used to embellish them. The main image, almost always more than life size, at the sanctum was more often than not built of brick and cement—Pagan has a number of them in her ruined temples—and these images have mostly crumbled down. And, besides this main image of the Buddha at the sanctum, there was hardly any necessity, whether for worship or decoration, of any other image or sculptural object when, especially, the temples mostly were dedicated to the creed of Theravada Buddhism. Exception is only made in the case of the more important temples of Pagan, even when they belong, and most of them, in fact do belong, to the Theravada faith; and one can see the niches and obelisks of a good number of them decorated with sculptures depicting incidents from the life of the Buddha, in a variety of poses and attitudes. That the Pagan temples were so embellished is only natural in the circumstances, for they were built under the direct care and patronage-read the numerous dedicatory inscriptions of the different temples—of the kings. Skilled sculptors with an art-tradition of centuries at their back were readily available at the capital where they had migrated either on royal appointment or of themselves to earn a living on their profession.

Iconographically, the Pagan sculptures belong to three different pantheons, Brāhmaṇical, Mahāyānist and Hinayānist, the last one claiming the largest number. But there is hardly any difference in artistic conception. The seated Brahmā in the Pagan museum (N. Ray, Brahmanical Gods in Burma, Plate XXII, Fig. 28) does not essentially differ from a similarly seated Buddha in the Ānanda temple nor is the figure of the standing Viṣṇu of the Nat hlaung Kyaung (ibid. Plate VII, Fig. 8) very different from any standing Buddha image of the period (Plate XIII, Fig. 2). They are distinguished by their positions and attributes and associates alone. Sculptures of female figures are comparatively very small in number, and belong to a type long established in Indian art and carried through ages and schools of artistic activity.

^{1.} Cf. Kramrisch, Pāla & Sena Sculpture, p. 111.

^{2.} Ibid. p. 116.









The material of the stone sculptures is a sort of hard sand-stone of greyish tinge quarried from neighbouring hills. The stone must have been quarried in small pieces as no large size image or relief has yet been discovered. Almost all the stone images are stelae, carved in relief; but already in the sculptures of the Ānanda temple the relief, in most cases, is practically independent from its back ground, the image standing as it were with its back against the slab. It often carries the effect of a figure in the round, though a fully three-dimensional sculpture is never achieved. In some of the slabs where there is scope for decorative motifs or additional figures of man and animals, the stelae are carved in graded relief.

The sculptures of Pagan have their best representatives in the large group of single images and reliefs in the niches and corridors of the Ananda temple. It is proposed, therefore, to base this study mainly on the stone sculptures of this temple, bringing, however, into perview those sculptures from other temples as well as from the collection in the local museum, which mark any significant departure.

The majority of the stone sculptures of the Ānanda temple relate to the subject of the Buddha's career until his attainment of the Bodhi, the series beginning with the request of the gods in the Tuşita heaven to the Bodhisattva to be reborn in his very last existence and to become the Buddha. They are roughly eighty in number but are not the only stone sculptures of the temple, for the walls of the corridors house in their niches numerous Buddha figures, either seated or standing, in various attitudes. Besides these, there are others still which illustrate scenes from Jātaka stories as well as episodes after the Enlightenment of the Master. Some of the niches are filled with Buddhas, large and small. They are all of the same type. The stone sculptures in other temples of Pagan, in the Kyaubaukkyi, the Nagayon, or Seinnyet Ama, for example, relate to similar subjects.

The sculptures of the Ānanda temple, belong to the earliest phase of the art of Pagan. They show well-established features known at least from some time past at Pagan. But extant examples of the pre-Anawrahta period are very rare: one or two fragments of sculptures only may be referred to that period. Such for example, is the seated image of Brahmā in the Ānanda museum or the small seated figure of Mañjusri in the same museum. Though they may be referred to a slightly earlier age, they belong nevertheless to the same phase of art as the sculptures of the Ānanda temple themselves. So do the Brāhmaṇical sculptures

^{1.} Illustrations of a large number of the stone sculptures of the Ānanda Temple appear on Plates XXXI—XXXVIII. A. R., A. S. I., 1913—14.

of the Nat-hlaung temple as well as the scattered Buddhist images of the Nagayon, the Seinnyet temples, the Shwesandaw or the Shwezigon, and the majority of the terra-cotta votive tablets inscribed with Sanskrit and Pāli legends in Nāgarī characters, sometimes even with the name of the king.¹

It is apparent, even at a first glance, that the sculptures of the Ānanda temple as well as of similar temples of Pagan are adaptations of an accepted formula. This is best seen in the endless repetitions of the same bodily form, facial type, standard poses and attitudes, similar treatment of dress and ornaments, and of composition. Whether it is a Buddha or Bodhisattva, seated or standing, or an attendant god or king, the bodily type is one of seeming elegance, within a stiffened outline (Plate XIII, Figs 1, 2; XIV, Figs 2, 3; XV, 1,2,). The two legs, specially in the standing figures are long and rigid, as if they were two stone columns, marked by an incised curved line where the stiff knee is to be imagined (Plate XIII, Figs 1, 2); and the feet with their toes rowed in a line are in such instances very stiff and heavy. But the hands find beautiful, though, conventional, expression in the wavy lines of the sensitive fingers (Plate XIV, Fig. 2; XV, 2).

A broad, but slightly elongated facial type is ordinarily shown with a pointed chin and a pair of long drawn eyes rising from the root of the nose to the temples, and a mouth pointed into triangular shape with corners raised high into the cheeks (Plate XV, Figs. 1, 2). With others a roundish cut of the face with cheek bones raised high seems to have found favour, and the pointed chin is slightly pressed upwards (Plate XXXIII, Fig. 19; XXXV, 37, 38, 39, A. R., A. S. I. 1913—14.)

As with regard to appearence so with regard to treatment as well. The modelling is hard and petrified and sometimes even coagulated (Plate XV, Fig. 5); in rare examples only there is a softer treatment of the flesh, at least in the upper portion of the body; but even there the harshness of the outline is sufficiently marked.

A fragment of a terracotta plaque with an effigy of the Buddha found within the precincts of the Ānanda temple is one such example, and may be considered as representing the best that the Pagan group of sculptures can offer (Plate XV, Fig. 1). The physiognomical type has a conventional charm. Similar is the seated figure of Mañjuśri from the Ānanda Museum. It seems, stylistically to be contemporaneous with the fragment just noticed. An earlier example is no doubt the image of Brahma, from the same museum. The face and the body yield to the same set and conventional type, but it is the modelling, the treatment of the flesh wherein it differs from its younger relative. The modelling is more soft and less petrified; the rigid tension that was later on to get the upper hand is not yet in evidence, nor is the definiteness of the outline so marked.

Each individual example from amidst the ruins of existing monuments of Pagan conforms, strangely enough, to the self-same characteristics; and whatever more or less difference can be detected, for example, in the form of the eyes or the mouth, of the face and the body, or in general treatment, is only one of degree or of variations in execution or determined by the skill of the craftsman. These characteristics cling tenaciously to even the feminine sculptures of our group, with this difference, however, that the petrifying tendency of the modelling is still more accentuated.

In the midst of the lifeless monotony of the Ananda temple sculptures two figures stand out in their peculiarity. One is that of Kyanzittha (Pl. XIII, Fig. 3), the builder of the Ananda, and the other of Shin Arahan (Pl. XIII, Fig. 4), his preceptor and Primate of the kingdom. These two are the earliest and perhaps the only portrait sculptures in Burma; they are evidence enough of the power of the colonial artists of Pagan. Both of them kneel with folded hands at the feet of the gigantic Buddha that stands before them—but their facial type is different—.

^{1.} In a few instances at least the names of Anawrahta and Kyanzittha do occur inscribed. See for example, A. R., A. S. I. 1926-27 pl. 61 ff.



Shin Arahan was a Talaing with a distinct Mongoloid cut of the face, while Kyanzittha possessed the sharp features of an Indian hero: whatever his father may have been, his mother had been an Indian princess.

The Buddhist sculptures of Pagan do not in any way differ, stylistically speaking, from the Brahmanical sculptures of the Nat-hlaung temple, the only ancient Brahmanical temple now existing in Pagan, in fact in the whole of Burma. It is however necessary to consider the significance of a south Indian Tamil inscription that was found in the debris of the eastern vestibule of the temple. The inscription is palaeographically dated in the 13th century A. D. and records the gift by a Vaisnava saint, a native of Cranganore in Malabar, of a mandapa in the temple of "Nanadesi Vinnagar" which according to Dr. Hultzsch "means the Vișnu temple of those coming from various countries. This name shows that the temple which was situated in the Buddhist country of Burma had been founded and resorted to by Vaisnavas from various parts of the Peninsula". Duroiselle thinks, perhaps rightly, that the Visnu temple mentioned in the epigraph refers to the Nat-hlaung temple which he is inclined to assign to the 13th century?. But I have tried to show elsewhere that the epigraph refers not to the erection of the temple itself, but to a mandapa which might well have been added latter on. The temple, if we are to judge by the sculptures that adorn its niches (as also by its architectural features) cannot date later than the middle of the eleventh century.

The images of the Nat-hlaung temple (For Illustrations: See the present author's The Nat-hlaung Temple and its Gods, Ind. Ant. 1932, Nov-Dec.) are all very badly defaced.

As with stone sculptures, so with bronzes, whatever be their subject-matter: they hardly call for comment or consideration.

Different from the usual type however, is the life-size standing Buddha at the south face of the Shwezigon pagoda (Pl. XIII, Fig. I) with his three other associates at the three other cardinal points of the sacred monument. It is related to it by the similarities in the general attitude and in the treatment of the sanghāti. For the rest there is a considerable amount of difference in the treatment of the face and of the other parts of the body. The hair is as usually treated in curls; but they are less ornamental, flattened considerably, and crowned by a pointed usnisa at the top. The round heavy face with high cheeks is of a child-like chubby type, somewhat

^{1.} A. R., A. S. B., 1902-3, p. 7.

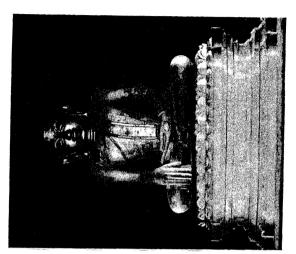
^{2.} A. R., A. S. I., 1913-14, pp. 136-137.

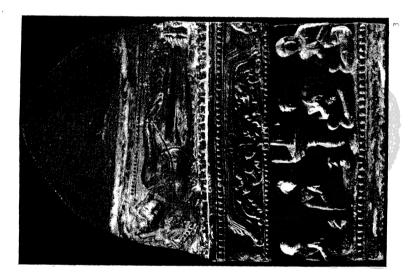
Mongolian in appearance. The body is broader, more fleshy and the waist is comparatively less attenuated.

The composition of the Pagan group of sculptures is limited to a few set schemes, traditionally handed down from early times. The upper portion of the stela is often left blank, but sometimes two flying Apsaras or two divines are placed on two sides. The principal figure occupies invariably the central position and the associates and devotees are distributed evenly on two sides, either standing or seated. When the number of devotees are too many for the space on the sides, there is often a rectangular horizontal panel below the main figure in which they are accommodated (Plate XV, Fig. 3). If the characters or episodes are too many on the sides, a very schematic composition is resorted to: the surface in such a case is distributed in compartments, but all of which are related, in a way, to the central figure. The scheme naturally follows the form of the stella, the top being occupied either by a device or by figures arranged horizontally. The majority of the Ananda temple reliefs have architectural settings in which case the composition is more simple, the main figure always occupying the central position, and the associates being distributed on the sides. In certain reliefs, the architectural setting. is sometimes finished by animal-vegetal (e.g. hamsalatā) designs, following the outline of the shoulders and the head, and enclosing an elaborately decorated aureole. This is, however, always carved in a lower plane than the image itself. Some of the reliefs are partitioned in two or more horizontal sections of different size.

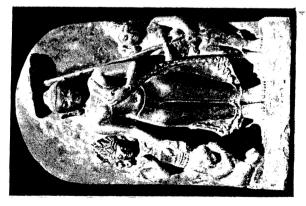
Of accessory motifs, the Pagan sculptures have but few. The lotus throne which is one principal motif, is always shown with double petals, deeply carved with welldefined edges. Another important element is the halo at the back of the figure which along with the architectural frame often affords a well-known design in which the hamsalata and hanging tendrils play a prominent part. The treatment of trees, whenever they are introduced for purposes of the subject-matter, is abstract, the leaves and branches being rendered in a summary way. In one or two examples in bronze, the stela consists of two upright posts fixed at the two sides of the lotus-throne, and two leogryphs, one standing on each side, fill in the space between the respective arm of the main figure and the post. With the heads of the posts as well as those of the two leogryphs as its base which ends in two makaras there finishes up a triangular motif having at its top a decorative kirtimukha disgorging, it seems, downwards on two sides two creepers ending in hamsas. It shelters the halo of the Buddha schematically shown as a lotus design.











Origins: It is obvious that these sculptures which are examples of an already well-matured tradition have a history behind them. This history was not native to the soil of Pagan, for hardly have we here any earlier sculpture tradition. Was it then native to the soil of Burma, that is to say, to that of old Prome, the capital of the P'iao (=Pyu), or that of Thaton, the capital of the Talaings? For, Prome and Thaton were the only two earlier centres of art and culture in Burma, so far as can be judged by extant archaeological remains. But this tradition is not indigenous, it has a strong impress from the Indian side. In the case of old Prome it came from either the Andhra-Pallava school of southern India or the later Gupta school of eastern India, while in the case of the old Talaing capital it seems to have been from Orissa. To none of these schools of art, however, can we affiliate the sculptural tradition of Pagan.

But one thing is obvious: the models responsible for the sculptural art of Pagan must have come from some contemporary school of art in India. Let us therefore cross the Bay of Bengal, and landing at the port of ancient Tāmralipti acquaint ourselves with the art treasures of the two provinces of Bihar and Bengal. These two provinces were for more than four centuries, from about the middle of the eighth to the end of the twelfth, ruled over by the Pāla and Sena dynasties. It is easy to discover in the productions of this school, the prototype of the Pagan images.

To show the affinities one may refer to two small stone votive tablets recovered from the ruins of Pagan, illustrating scenes from Buddha's life² (Pl. XV, Fig. 4). The similarities in arrangement, facial and physiognomical type, attitudes and artistic treatment with those of the reliefs of the Eastern school are so remarkable that they led M. Duroiselle to think that these two slabs were imported into Burma from India though he could not ascertain the exact source. Although the tablets are Burmese, the source of this influence has now been indicated.

The parallelism thus seems to be definitely established. And it can only lead to one conclusion, namely, that craftsmen from different centres of Bihar and Bengal must have migrated during the tenth, eleventh, twelfth and thirteenth centuries to Pagan, the capital city of Burma and they alone should be held responsible for the large number of stone sculptures and bronzes that hail from Pagan. Some of them might have permanently settled there for purposes of opening out a new field for their work, and were readily appreciated not only by the local people but by south-Indian emigrants as well. There is abundant evidence of a mutual intercourse between Bengal-Bihar and Burma during this period. In the ruins of Pagan have been discovered a large number, almost a deluge, of terra-cotta votive tablets with Fali and Sanskrit epigraphs in east-Indian Nāgari characters (recording

^{1.} Kramrisch, "Pala and Sena Sculptures", p. 107.

^{2.} The two slabs measure 8", 61/2" and 7", 6" respectively; and were discovered in a field close to the Shwezigon Pagoda, and within the debris of a ruined pagoda near Myinpagan. A. R., A. S. B., 1923, pp. 30-31.

in most cases the well-known Buddhist formula as well as dedicatory lines containing names of the kings of Pagan) which can palaeographically be assigned to about the eleventh and twelfth centuries. Some of them were evidently imported from the main land; but a large majority were cast and moulded locally. These terra-cotta votive tablets mostly bear on them effigies of the Buddha with or without his disciples and associates, (sometimes, though rarely enough, with the main incidents of his life in relief); they are, in fact, replicas of similar tablets found at Nālandā, Bodhgayā, Sārnāth, Pahārpur and other sites of Bihar and Bengal, during this period. Moreover, we have the definite and almost conclusive evidence of Tārānāth who testifies to a very intimate relation of the Magadhan countries of eastern India with Pukham or Pagan during the rule of the Pālas and especially during that of the Senas.

And this relation was nothing if it was not reciprocal. With Burmans, Bodhgayā, in fact, all important localities of Bihar, are holy places of pilgrimage, every to-day. An early example is that of king Kyanzittha, the builder of the Ānanda, who himself 'gathered together gems of diverse kinds and sent them in a ship to build up the holy temple of Bodhgayā and to offer lights which should for ever burn there. Thereafter king Kyanzittha built a-new, making them finer than before, the great buildings of king Aśoka, for they were old and in ruins.' Another king, Alaungsithu, grandson of Kyanzittha, sent an envoy with funds to repair the holy shrine at Bodhgayā, a fact still in record in an inscription at the shrine. In Pagan itself there is a temple, the Mahābodhi, an unsuccessful imitation of the celebrated temple of Bodhgayā.

The kings of Pagan also entered into matrimonial relations with princes and princesses of royal families of eastern India; Kyanzittha's mother seems to have been an Indian princess; she was a bride from Vesali which should be identified rather with the ancient city of the same name in eastern India then with Vesali in Arakan. But of more definite historical import is the celebrated love-romance of the prince of Pateikkara, identified with Patikara in the modern district of Tipperah, with Shwe-einthi, the only daughter of king Kyanzittha, and the marriage of a Pateikkara princess with king Alaungsithu.

Burmanisation: The sculptures and bronzes of Pagan were influenced by local types and traditions. Changes were effected gradually and finally completely transformed the imported tradition.

Already in those very sculptures that show remarkably close affinities with the Eastern school, a discerning eye can detect certain local elements, for example, in the characteristic architectural background of the majority of the reliefs of the Ānanda temple. The types of buildings represented are far from Indian, but are frankly local i. e., Burmese; these buildings were evidently made of wood, and were translated into stone on the reliefs by the artists, who presumably were Indians, from the models they had before their eyes in the city. Some of them show in their different pedastals (pīṭhas) (e. g. Plate XXXVII, Figs. 55, 56, A. R., A. S. I., 1913-14)

^{1.} Schiefner, Tārānāth's Geschichte des Buddhismus in Indien, St. Petersburg, 1869., pp. 72,147, 11,252ff., 262 65; also the present author's forthcoming monograph on Studies in the Early History of Buddhism in Burma, Chap. III, Sec. 3.

^{2.} Third Talaing Inscription at the Shwesandaw Pageda, Prome, Ep. Birmanica, I, ii, 153.

^{3.} Mitra, Buddha Gaya: Hermitage of Sakyamuni, I, 78; A. R., A. S. B., 1911, p. 18; J.B.R.S., 1912. "Owing to this and subsequent Burmese missions, the details of the Buddhagaya temple, especially in the basement images, are unmistakably Burmese;" Harvey, History of Burma, p. 46.

^{4.} These romantic accounts are well-known in Burma, and are acted on the stage even to this day. Readers may, however, be referred to Hmannan, or the Glass Palace Chronicle pp. 105, 133-34; Phayre, History of Burma, pp. 37, 40; Harvey, History of Burma, pp. 39, 49 and 51; A. R., A. S. B., 1923, p. 32.

raised cones at the centre and corners, a very popular feature of Burmese architecture. Moreover, there are the almost petty, wavy frizzle of the ends of the robe or the heavy and formless pair of feet with their toes arranged in one line or the exaggeratedly stiff and uncompromising poses and attitudes of the body and of its parts, all characteristic of the local school whose craftsmen were used to carving and chiselling primarily in wood.

In some of the examples of even the earlier phase one can also notice a facial type, somewhat of a Mongolian character, with a roundish cut of the face, the mouth framed in a bow-like curve, high cheek-bones, a nose flattened to some extent and half-closed eyes within a cavity that grows roundish with time (Plate XXXVII, Figs. 53, 56, A. R., A. S. I., 1913-14). In others the treatment too has undergone a change; the petrifying tendency has deteriorated into a hard and flat modelling. This increases with time, and develops into the stiffness that characterises all later images. The body also undergoes a transformation; the attenuation of the waist is on its way to decrease. The pose and expression of the face and the body gradually become more and more dull, hard and stiff (Plate XV, Fig. 4). It is, therefore, only natural to assume that the craftsmen entrusted with the execution of these sculptures were local i. e., Burmese, probably co-workers or apprentices.

In some of the examples from the Ananda itself, the process of Burmanisation is still more noticeable. In them we see a flat, broad, heavy and roundish face with half closed eyes set within a cavity, and a flat, stunted nose, ears with heavy and stiff ear-lobes, a most stiff pose which is all the more accentuated by the stiff attitudes of the hands, legs and feet, and the heavy fingers that are rowed in one line. The body is treated in a hard and flat manner. The petty zig-zag of the ends of the garment, undoubtedly a local transformation, as well as the peculiar mode of dressing the curly locks of hair are new features that are gradually asserting themselves.

An example from amidst the collection of bronzes in the Pagan museum reveals an entirely new facial type, frankly Mongolian in character. It is flat and broad with small shallow eyes, portruding cheek-bones and a vacant expression on the face. The two flanking devotees seated with folded hands are undoubtedly. Burmans. This accounts directly or indirectly for the Burmanisation of the Buddhaface as well. The process of Burmanisation is visible also in the form and treatment of the flame designs of the stela which are much more ornate and elaborate. The lotus petals of the seat have become sharper and pointed.

From such examples as these to the seated Buddha of the third terrace of the Thatbinnyu temple (Plate XV, Fig. 5) it is not a long jump. The Thatbinnyu Buddha is but a typical representative of later Burmese sculpture. Its facial type is a lineal descendant of that example we have already referred to (Pl. XV, Fig. 4). It is a round, heavy, flat face with raised cheek-bones, round eyes, flat nose, thick lips, almost parallel, and a dull expression. The flat and hard treatment makes the image lifeless. The attenuation of the waist has considerably decreased. The hands are most stiffly posed, the fingers have become longer but they are heavy and rowed in one line. But the changed attifude becomes more and more marked in the treatment of the end of the garment which is represented as a thick, flat and separate surface lined by rounded ridges and stuck to the chest. It does no longer flow in curves, nor show any frizzled ends.

Other art-traditions in Pagan: The affiliation of the Pagan sculptures and bronzes with those of the "Eastern school" does not preclude the possibility of the existence of other art-traditions in the Burmese capital. In fact there were and they too have left their traces; but their examples are rare and their influence feeble. An almost life-size image of a standing Siva (Brahmanical Gods in Burma, Plate XVI) executed in greyish sandstone, is, in fact the only important example of stone sculpture extant that can be attributed to a different art-tradition than what we have referred to above. The image is worked in bold and round relief; its form and execution are south-Indian and remind one of late Cola examples. A standing image of Viṣnu in bronze, from the field of Myinkaba, may be cited as a second example (Ibid. Plate XII). The image seems to have been cast locally by an indigenous craftsman in the service of an Indian master who had the heritage of a south-Indian art-tradition in the store of his knowledge. The image may, both artistically and iconographically be compared with a similar bronze image of Viṣnu at present in the Madras Museum.

^{1.} Gopinath Rao, Hindu Iconography, Vol. 1, Part 1, Plate XVIII.

KALINGA TEMPLES.

By St. KRAMRISCH.

Archetype.

The physiognomy of medieval Indian temples is shown by their exterior, mostly full of sculpture. Walls and sculpture, inasmuch as the latter is the extreme, i.e. the most externalized articulation of the former, are inseparable in medieval Indian temples. The walls are not covered with sculptures; on the contrary, in them they gain visibility specified. In shapes and in meaning the whole of the temple lays itself out. Moreover, the rules that are valid for the cult image also apply to the sculptures on the walls, and reversely: the principles active in sculpture as part of the wall, continue to act in the cult image. Though not part of the wall it steps forth from its own wall, i. e. from the slab of the stela. Kalinga temples will be referred to here as a special instance of a more general case (p. 53) and of these the Rekha type? of temple as the most characteristic and widely spread. The approach will neither be stylistic nor conceptual. The stylistic method points its arrows in one direction, it goes along with time, the conceptual takes no notice of time, but sees in symbols the archetype preserved. It recognizes them as far as their identity goes; "universalia ante rem"—and the archetype itself carries a name. The visual approach knows of no names but is aware of a mould which is preestablished, and becomes apparent by its persistency. It sees the archetype in which the form is moulded.

Kalinga, the Eastern variety of Nagara buildings covers approximately the country between the Suvarnarekha river in the North, to Cicacole in the South

^{1.} There are temples, for instance the Uttaresvar and Siddhesvar in Bhuvanesvar, which have only the images of the Pārsvadevatās. The walls of a number of minor shrines, too, are articulate, without sculpture. Financial considerations may account for this.

^{2.} i. e., the sanctuary with square base and curvilinear tower.

^{3.} An inscription (A. R., A. S. I., S. circle, Epigraphy, 1915 pp. 49, 90) mentions Kalinga as a type of building by itself, next to Nagara. The monuments do not confirm this.

and extends to the West into the Central Provinces (Raipur District).1 Bengal too has related temples (Bankura, Barakar, and Bihar (Manbhum, Mundesvari temple at Bhabua, Arrah Distr.,) can show some ruins. The majority of temples are at present in Orissa and Ganjam. These will be considered irrespective of such ancient subdivisions as Utkala, Tosala, Kongoda⁶, etc., or Kalinga of the hills⁷ or of the plains. The colossal Buddhist sculptures of the Cuttack hills, the Matr images from Jajpur⁹, the figure sculptures from Mayurbhanj¹⁰ are stylistically varied. ramifications within the given type, yet where walls have sculptures—though sparingly in the Cuttack hills as well as in Mayurbhani, etc., and mainly round the doorways in the two last instances,—the principle remains the same. Four centuries. from A. D. 800 approximately to the thirteenth century are the chronological limits. Beginnings about A. D. 800 are due to the accident of preservation, the end in the thirteenth century to the Mohammedan inroad¹¹. The beginnings do not mark a starting point. Surface completely carved and modelled distinguishes the gates of Sañci. A 'derivation' from post-Gupta Temples (Deogarh or Mundesvari Temple at Bhabua) refers more to the apportionment of the walls than to the relation of (810/260)(8/2) wall and sculpture.

The exterior of Kalinga Temples shows the archetype with its lack of isolation, its coherence, impact and transcendency, which has stepped into complete visibility, clothed in the variabilities of actual monuments. Motifs will not be considered here as far as they are defined by names. In this respect they are equivalent to symbols. The mould however can not be recognised merely by a name. Its existence rests in its activity. It holds and shapes the particular form and is prior to it, Prakṛti, equivalent with the pre-matter of Sāmkhya. It activates articulation, and consolidation in rules.

^{1.} For inst. Laksmana temple, Sirpur, Coomaraswamy, History of Indian and Indonesian Art, Pl. LI.

^{2.} Coomaraswamy, op. cit., Fig. 213.

^{3.} S. K. Sarasvati, The Begunia group of temples, J. I. S. O. A., Vol. I, p. 124, Pl. XXXVI.

^{4.} R. D. Banerji, History of Orissa, Vol. II. P. XV.

^{5.} A S. I. A. R. 1902-3, p. 42; 1923-24, p. 25; R. D. Banerii, op. cit. Vol. II, Pls. facing pp. 152, 240.

^{6.} R. D. Banerji, op. cit. Vol, I. p. 4.

^{7.} cf. The Quarterly Journal, Andhra Historical Research Society, 1926, G. Ramadas, Tri-Kalinga, p. 19.

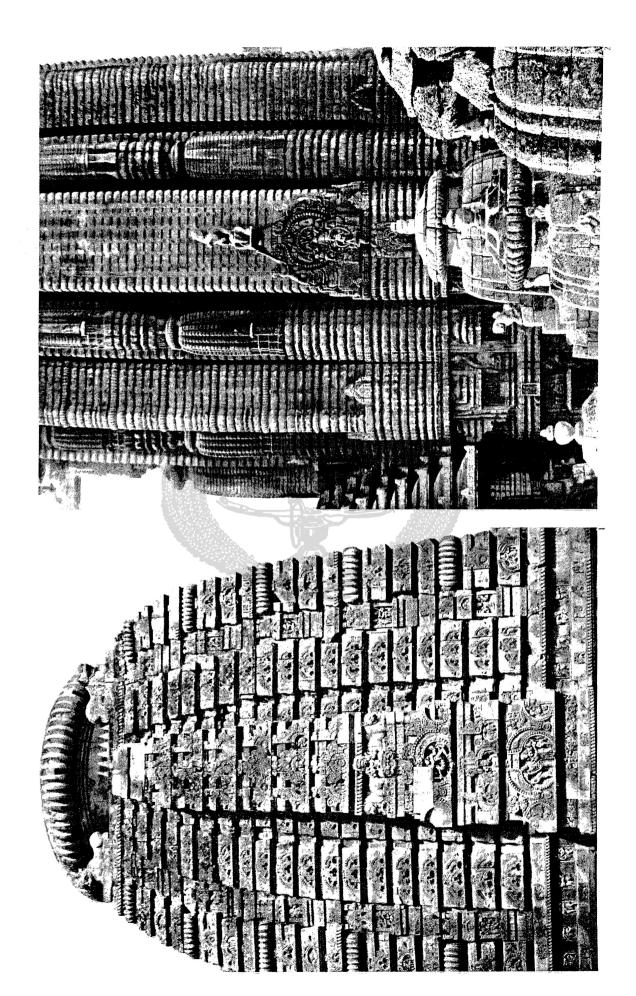
^{8.} R. P. Chanda, Exploration in Orissa, A. S. I. Mem. No. 44, Pls. II-VI.

^{9.} Ibid. Pl. I.

^{10.} Cf. R. P. Chanda, Bhanja Dynasty of Mayurbhanja, Mayurbhanj 1929, Pls. I-III, X-XV, XIX, XXI-XXIV; Kramrisch, Indian Sculpture, Pl. XLII; A. S. I. A. R., 1922-23, Pl. XLII; XLII; 1924-25, Pl. XXXV.

^{11.} For a relative chronology of the temples of Bhuvanesvar, cf. A. S. I. A R, 1923-24, R. P. Chanda, the Lingarāja or great temple of Bhuvanesvar, pp. 119—122.

^{12.} Significantly enough the interior of these temples is small, plain and reticent of sculpture, but for the ceilings of the mandapas of Muktesvar and Brahmesvar.



Such factors that were instrumental in the particular constellation, such as racial origins, immigrations, etc., will not be considered here. The active source itself within the given constellation, the archetype, the fundamentals, will have to be demonstrated in the one province and through the four centuries.

It is not the question here of 'origin and development' of wall articulation prevalent in Kalinga temples, but a purely physiognomical study will be attempted. Nor will the single motif be investigated in its origin, meaning and transformation, but the principle which holds together the multifarious motifs will be searched for.

Variation I. (a) Architecture.

In the group of temples of which the Parasurāmesvar¹ (Pl. XVI, Fig. 1, c. A. D. 800) is the largest and most accomplished, facets (pāgas²) project relatively little (they have a small jhalama, i.e. amount of projection) although on different levels. The centre projection, the Madyaratha is the highest, then follow the corner projections (kanyāsa pāga), the next lower level is occupied by the two wings of a broad Pāga, which underlies the Madyaratha, and by an entire Pāga on either side (anuratha). The interval between Anuratha and Kanyāsa is filled at a slightly lower level with a row of superimposed devices. Finally there are vertical rows of plain horizontal courses of various width in-between all the Pāgas. But even then the lowest level is not reached yet. Three narrow and step-like tiers in-between the horizontal courses lead to it.

These are the five levels in depth which alternate in the vertical direction, whereas the sixth, the lowermost level, attains visibility horizontally as a dark recess. As relatively flat surfaces the single Pāgas cohere in the vertical direction stretched as it were from the horizontal moulding below (baranda) to the square plinth on top (ghāra cakarā). Divided into almost straight and small rectangles they adhere closely to the mass of the temple body. It is self-contained and attempts to step beyond its own limits there only, where this is safest, i.e., in the middle of each of its bent four sides and not at its corners. Seemingly flat surfaces on parallel levels are outlined by shadows that cling to their sides and have settled in the interstices. They are cut across horizontally by deep shadow lines which are contained within the stepped recesses in-between the recurrent motifs. These lines of darkness annihilate almost the three dimensional gradation, so that each of the four sides

^{1.} Codrington, Ancient India, Pl. 56.

^{2.} Re. terminology of temple architecture, Cf. N. K. Bose, Orissan Architecture, Calcutta 1932, p. 178 and passim.

of the spire (gandi) seems to consist of single rectangles, each stamped with its motif. They appear in series, one next to the other, without any stress, calculatedly, regularly. Each of the four surfaces of the sanctuary moreover meets the next in a corresponding manner. It preserves neatness of definition. The Gandi is unmistakably four sided and the four Kanyāsa Pāgas seem even to enhance this for they adhere like tight clasps to the squat volume.

The clear cut four-sidedness well agrees with the clear cut units into which each side is parcelled out. Each such unit is stamped with its own device and the split Gavākṣa¹ window item of the Anuratha Pāgas is not less articulate than the framed niche and Gavākṣa device on the next lower level. It is but in the upper part of the Madhyaratha that the split-off wings of the Gavākṣa device send out their finial as a tentacle to catch up with the next higher motif so as to affect a continuity.

Each such small plot is well defined and so is the motif that graces it. The Gavākṣa devices all along their outlines are beaded with chains that hold them like close set rows of pin heads.

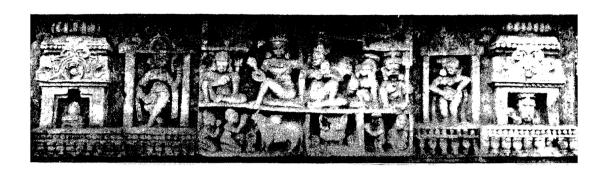
A tight volume, gravid to the brim, masters its own fullness with a well-marked measure. Discipline and cohesion of neatly defined units, flat in the main and outlined by dark shadows, within a self-contained volume, distinguish this phase of wall-articulation.

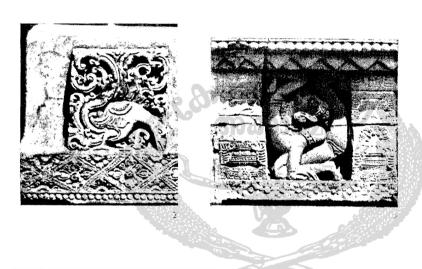
Variation I. (b) Sculpture.

Such figure sculpture as there is part of the wall, is of small dimension, fitted into a frame-work of 'architectonic' derivation (Pl. XVII, Figs. 1, 3, 4) or else itself so displayed that it makes up a square or rectangle of its own, within its self-contained limits (Pl. XVII, Fig. 2 and also Fig. 3). Even where the configuration is comprehensive as on the door lintel of the Laksmanesvar shrine (Pl. XVII, Fig. I), one of the small ruined shrines opposite Rāmesvar temple, which shows Siva and Pārvatī in Kailāsa, the whole amounts to a display of figurines boxed into compartments, mapped out by limits thin like matches, some of architectonic suggestiveness, or of none besides being limits or may be, they are limbs at the same time too.

Devices adhere to the surface, and the figures spread out into surfaces which they create themselves within the level prescribed by their surroundings. The modelling which makes this possible has a tough fluidity which sustains the

^{1.} Coomaraswamy, Early Indian Architecture III. Eastern Art, 1931, p. 205.









outline and dilates it with tenseness (Pl. XVII, Fig. 3). Of a leaden heaviness it fills a form spread and splayed into the surface, entire and defined, as every one of the Pāgas is in itself, and equally dependent upon, or responsive to, the elements next to it and to the whole which lays itself out simultaneously in every part.

That such figures must have squat and heavy-featured faces is conditioned by the form physiognomy of the entire structure, and there are two alternatives of appearance: a blunt and tough fullness (Pl. XVII, Fig. 4) turgid with sap and vacant of anything else, while the other has not the bead-like tautness but relaxedly shows large features with little detail and much fated pathos, carved or modelled, and sustained by an orthogonal linear discipline (Pls XVII, Fig. 3 and XVIII, Fig. 2) which also belongs to the gridiron appearance of the sides of the Rekha or of their seemingly pile-work-like structure (Pl. XVI, Fig. 1).

To this phase, to the latter aspect and to its most fluid possibility have to be assigned the Pārsvadevatā figures of the Uttaresvar temple, Bhuvanesvar (Kāma with Ratī and Tṛṣṇā, (Pl. XIX, Fig. 1). The relief is potent with a modelling which wells forth broadly, and with a clinging softness into jewellery and apparel. (Two of the faces have been worked over, fairly recently it seems.) The extremely large and vapid hands of these figures, along with the feet bent in the ankle joint and somewhat severed from the rest of the body and the vertical surface into which it is laid, act as points of fixation vertically or else between the various levels of the relief. The fluency of treatment of this relief has its iconographical embodiment in the Makara-standard behind the Mukuṭa of Kāma.

A self-contained volume carries meticulous order (Pl. XVI, Fig. 1). It is replete with devices. Bounded by its own extension, the unit comes into existence while it is part of the entire scheme. There is in fact, no single, isolated unit; partitioning is the method resorted to in order to master the whole. It is not a process of building up a whole, but of making its wholeness apparent, rectangle by rectangle, each impressed with a device, each bearing its infinitely re-stated unit of a meaning. The whole surface and the mass along with it are parcelled out.

Archetype, and Variation I.

Centrifugal fullness is disciplined. This refers to the manner by which it is compressed whithin the batter of the sides. Volume emerges appreciably in the middle of each side only, which makes this stepping forth well sheltered and recumbent upon a broadly expanded support; correspondingly also all differentiated form closely

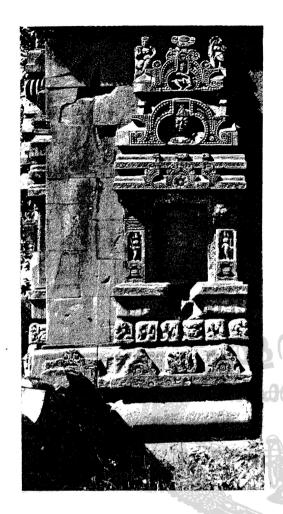
adheres to the surface that carries it, itself sent forth with measured care. As if bound up within the whole from where it comes forth so far and no further, the surface full of device is but the living cortex, given a pattern and a meaning, of a total volume of which the external shape may vary in the established types.¹

Cohesion is brought about by the upward urge. The entire structure is seen to grow upwards as it were; the Madhyaratha like a sling binds the entire Gandi, and all the other Pāgas with their inward batter (rekha) tend towards the same point. Cohesion in the vertical direction runs in symmetrical courses along the curved surface of the wall. It is of the nature of fibres and is made visible as surface articulation, different from the impetus which sets forth as it were, each unit of a Pāga and each Pāga as a unit, up to a definite level which is allocated to it. The upward urge has an unappeased curve towards a central point; all Gandis are truncated and drawn in towards the neck (mastaka). Their shape which is made finite with flat Āmalakya, Khapuri and Kalasa finial, is yet unachieved and overshoots its own actual extension by its inherent urge. The inward batter of the upper portion of the Gandi in this type of temples comes with an unexpected suddenness, and by this very gesture which is wilful makes apparent that the upward urge has not come to an end.

Whereas the upward urge—which is part of the potency of the mass—is active in one direction and can be likened to such mythological imagery as that of the "fathoming of the lingam", the outward impetus which works from within the entire mass, starts centrifugally at all the points of its vertical axis, in every direction within each specific horizontal plane. The impetus creates mass which is its substance. The upward urge seizes it, becomes saturated with it and keeps it in shape. Both are dynamic, the one produces matter, the other has growth, and the meeting of the two yields their twofold impress. In the class of temples of the Parasurāmesvar type which is the earliest preserved in Orissa, it is marked with an almost abstract precision. But the orthogonal system of intersection does not coincide with the extension of the single building stones (Pls. XVI, Fig. 1, XVII, Figs. 3, 4).2 These are frequently joined anywhere within the rectangular units. This orthogonal system is also applied with reference to the single figure, or groups of figures and their extension (Pl. XVII, Figs. 1-3). The rational devicing had no long duration in Kalinga. The persisting aspect is the

^{1.} i.e., as Rekha, Khākarā and Bhadra. In the sub-variety of Khākarā as shown by the Kapālini Devi (Vaitāl Deul), and the Bhadra type, the vertical and the horizontal are made to intersect more mechanically than organically.

^{2.} It is not technically conditioned.







visualisation itself of the mass-creative impetus in the broadly welling forth figure sculpture (Pls. XIX, Fig. 1; XVII, Fig. 3)¹. The latter, which is the root attitude is maintained throughout Kalinga temple architecture and sculpture.

The possibilities of transformation adopted by the exterior of these temples in succeeding phases will be now shown. The theme itself is pre-established and each monument makes it manifest as one more variation. It will be seen to what extent and in what direction time acts its part and how far the various constellations are aspects of the root attitude and forecast by it.

Variation II.

On the straight part of the wall (bāṛa) between pedestal and spire of the Vaitāl Deul² in Bhuvanesvar for instance and even more so on that of the Somesvar temple (Pl. XVIII, Fig. 3) at Mukhaliṅgam³ (Ganjam, c. A. D. 900) the contracted and unified niche motifs, with the balanced order of their large and graded surfaces advance, each a sum total and not the result of juxtaposition as on the Parasurāmesvar (Pl. XVIII, Fig. 1). The wide rectangles have room for figure panels and scroll (ḍāli) facets. As one broad frame work, top and sides are joined and laid around the niche. Comprehensively graded surfaces link up in depth the frame with the images. The single surfaces may appear thinned with their rhythmically alternating patterns—scroll panels as a whole, against the figure panels as a whole—of light and darkness on one level; they are connected by mellowed transitions between the planes.

To set off each of these large units of niches consistent within themselves by subtle gradation,⁴ deep and broad gaps replete with darkest shadow intervene. The mass, while stepping forth, hugs to itself its sculpture and keeps it fastened to, and embedded within itself.

The figures (Pl. XVIII, Fig. 3) now are altogether set into compartments which they no longer need make up for themselves with their own limbs and the manner in which these are placed. They are relatively less tense and more alert in outline. Even when shown standing one knows that their pace has quickened. Their

^{1.} Pl. XVII, Fig. 3 shows in equal shares, rational devicing and mass-creative impetus.

^{2.} Codrington, Ancient India, pl. 61.

^{3.} For the historical position assigned to the temples of Mukhalingam, see Quarterly Journal of the Andhra Historical Society, 1931—32, p. 62; 1932—33, p. 237, R. Subba Rao, The History of the Eastern Gangas of Kalinga. The late inscriptions quoted there do not contain indications concerning the erection of the Someśvar temple. Stylistically the Someśvar is prior to the Mukteśvar, Bhuvaneśvar. Cf. ibid. 1931—1932, Plates facing pp. 60, 78, 79, 209; and 1932—33, Plates facing pp. 130—132.

^{4.} In the niche of the Parasurāmesvar (Pl. XVIII, Fig. 1) the contrasts are less, and clearer marked. This refers to profilation, height of relief and to the relation of light and shade conditioned by them.

outline has a sinuous course and appears loosened. The same is true about foliage' and scroll devices. Self-contained or crisply curling back upon itself, each device consisted of single parts separated from the other as much by the principle of rectangularity as by a contrast of light and darkness (Pl. XVII, Fig. 2). Such crinkly and hooked sparseness however is not fastened into relief on the Somesvar and other temples, where the flux of the motif meanders in sinuous creepers and is shed into the entire panel whose surface heaves with scrolls like a rich field brushed this way and that way by indefatigable whirls of growth (Pl. XVII, Fig. 5). Such a welling forth at a quickened speed yet tenaciously adheres to the surface while it is at rest within its broad expanse.

If the juxtaposition of the Parasurāmesvar type as far as the Bāṛa-portion goes, had been commuted into coalescence in the Somesvar, this has become more thorough and comprehensive in that group of temples, of which the Muktesvar (middle tenth century) is the paradigm (Pl. XXII, Fig. 1).

Variation II. The Problem of Time.

As we pass through the centuries from building to building, the question obviates itself how time becomes apparent, how it can be imagined exteriorized from within the potent mass and linked with the upward urge: It operates along a direction that lies within the archetype.

The upward urge incessantly outgrows what it builds up. Its temporary fulfilment is pushed from the one monument to the next. The outward impetus in its turn acts in increasing specification, in ever more heated intensity radiated outward, towards fusion and comprehension of the small in the intricacy of the large. Time is no category outside the monument; it is part of the urge and potency of its mass.

Of the Muktesvar temple the Pāgas of Bāra and Gandi are one (Pl. XXII, Fig. I) and the necking (kānţi) in-between the two serves as an accent only and so does the large and projected Gavākṣa on the Madhyaratha. The Pāgas of the Rekha and Bhadra walls seem covered with a veil of split Gavākṣa devices. It undoes the partitioning horizontalism of the single mouldings and uses their shadow-grooves as bilateral foil for its own pattern. Contraction and unification make the Kanyāsa Pāgas appear like ascending rods with knots, the Amlās are out of proportion and mark less the single stories (bhumis) than they suggests the nodules of a bent bamboo. To achieve this, only the Amlās had to gain in volume and this is done by two

^{1.} Codrington, op, cit. Pl. 57; Kramrisch, Grundzüge der indischen Kunst, Pl. 22.

recesses interpolated at the corners so that the four sides of of the Gandi are no longer sharply separated as distinct surfaces, but they merge the one into the other in one heavily rounded volume (see note on previous page).

What is true about the corners, holds good for the entire building. All its Pagas have increased in the third dimension; vigorously the temple body steps forth in all directions, mellowed in detail and bold in major contrast. The interpolation of one new device is significant. The narrow and vertical recess or the fourth lowest level (p. 45) with its rectangular niche motifs filled with figure, now also emboldened in the third dimension, hangs out its niches like a series of lanterns (Pl. XXII, Fig. 1). This demands an indication of support and it is given by round pilasters with a Naga or Nagi coiled around the shaft, supported by two lion devices, while the lower part of the pilaster, freely and in inverted order repeats the portion on top.

Several factors are embodied in this rounded pilaster; the unifying tendency in the vertical direction which is also conspicuous in pendentives vertically thrown across moulding of the base (pābhāga), the stepping forth of the mass into roundness as a high degree of volume, and a saturated ease in taking this step, so that the round pilaster is entwined by figure sculpture, an indissoluble whole, where obviously the 'architectonic' and the 'sculptural' are but differentiations of the impetus towards organised volume and meaning.

What is active vertically is also valid horizontally. Projections with relatively flat surfaces (Pl. XVIII, Fig. 1) prevail in the early type and hide their bent part of the surface in the darkness of the horizontal recesses above and below. They form boldly outlined units. The Pābhāga (foot) of the Someśvar (Pl. XVIII, Fig. 3) on the other hand flows out at the base, while it yet appears solidly upheld, by a vertical continuity of convex and concave surfaces welded together in deep grooves. The cascade, if seen from above, the chalice, if seen from below, of the Pābhāga mouldings of the Rāja Rānī (twelfth century) show a subsequent unfoldment and concentration (Pl. XXII, Fig. 2) to that of the Muktesvar (Pl. XXII, Fig. 1).

The sending forth of volume and ultimately of figure, this utterly visualised dynamism of the archetype has a thoroughly consistent discipline. Rectangular pilasters step out—further than before, above a level of plain profiles with a

^{1.} These had put in a shy appearance for inst. in the Someśvar temple (Pl. XVIII, Fig. 3) and are well marked on the Laksmana temple, Sirpur, I. c.

^{2.} See also the temples of Gandharadi near Baudh, R. D. Banerji, Antiquities of Baudh State, J. B. O. R. S. Vol. XV. p. 64.

scroll field, (vanalatā), in which no rambling creeper marks stages or limits (Pl. XXII, Fig. I, Bāra, left edge). Deeply cut scroll-curls stir the whole field into one teeming agitation, mastered by bead chains on a higher level, so that it will not overflow but keeps its restlessness as the setting against which the full and human-limbed figure is made to recline on its highly projected pedestal.

The increased corporeality of the Pagas is communicated to the figure sculpture; this not only results in a higher, but in a peculiar type of relief where the figures unsheltered by any frame appear in front of the carved ground. They do it with a kind of super-volume, out of which they grow while at the same time they leave it behind themselves, as less articulate endeavour, of the mass which ties their detailed exuberance to the entire body and actually visualises, if seen from the side, the coming forth, a stage of becoming form, as a part of the entire visibility of the monument (Pl. XXII). This fact has to be seen together with the completed execution in the front view and with the minutest care, oftentimes the fullest artistic realisation, of reliefs hidden in recesses or so high up that they are scarcely visible, in order to understand that the craftsman, while carving the monument and modelling it in situ, identified himself with it, did justice to its demands as a living body and did not look upon it as an outsider who judges effects. That means, any surface parallel with the temple wall offers itself ripened into complete visibility, i. e. finality, in every detail, whereas any surface at a right angle to the main extension of the temple wall, leading as it does from one accomplished stage to the next, must be midway between the two, or in relation to the whole, on its way. It amounts to the impulse to become form made visible. To these vertical surfaces placed at angles to the 'facade', dynamic value has to be assigned; they show the process itself of becoming form, entered into form; their validity is of relative value if seen by themselves, yet of essential value in view of the whole monument.

The upward urge, productive of rhythmical coherence essentially contains time. Inherently in its upwards tension, explicitly if viewed at various instances when it is actually seen growing from temple to temple.—The Rekha considerably increases in height in proportion to the base, as "time goes on."—It shoots across and thereby gives definition to the potency of the mass which keeps on setting forth mass eager of shape, laying itself out in simultaneous presence.

In view of this, time and space do not seem to be the categories according to which these monuments exist. The outward impetus produces volume; the upward urge which is but one other direction within potent mass, is the carrier



of time; the ubiquitous potency of the mass is in need of a correlate that will not be exhausted by it. Volume has space for its correlate. The correlate in this case can not be space, which though boundless, is static, i. e. finite. Potent mass has its correlate in the infinite. Potent mass—in which time is integrated—and the infinite, and not space and time are the categories in which rest physiognomy and constellation of the whole type and of each of its representatives.

Coherence.

Another relation i.e. that of monumental mass and sculpture,—after once for all having made sure that sculpture is but its highest and most differentiated exponent, —is one of coherence. This has two modes, i. e. of carving and modelling. The Gavakşa device and the scroll (vanalata) which are used most extensively, along with less universal devices such as the chess-board pattern etc., are carved on the whole, whereas the figure sculptures are modelled. The carved treatment of the Gavākṣa-pattern consists in parallel and vertical surfaces cut into the stone like shallow steps which gradually carry light into darkness and lead from the surface of the stone into its depth (Pls. XVI, Fig. 1; XXII, Fig. 1). In the treatment of the scroll work also, coherence between ground and upper surface, and their approach by gradation are there. In this case, light is not carried by shallow steps, but glides along obliquely cut surfaces (Pls. XVII, Figs. 2, 5; XXI; XXII, Fig. 2). One resting on the next, and the last on the ground, or else they curl up spiralically and in this manner their counter-play effects further transitions of light and darkness. Still, with an increasing tendency to become tangible, the carved and major part of the scroll work becomes more and more modelled. The scrolls curl up in lumps instead of plaques (Pls. XVII, Fig. 2; -XXI, XXII, Fig. 2).

The building as a whole, of flatly graded and clear cut surfaces at first, tends to become modelled in vast and melting roundnesses, as 'time goes on' (Pl. XVI). But figure sculpture from the outset was modelled, barring such exceptions—(Pl. XVIII, Fig. 2) which, exceptions though they are, could only have occurred at the early phase—where the comparatively flat relief is cut in surfaces at angles with the ground, while the latter is raised in angles towards its modelled (!) rim.

Modelling is given preference to carving, from the tenth century onward. This refers to the general conception. The stepping forth of Paga above Paga is

^{1.} These terms used here indicate differences in degree, of stone treatment and do not imply the respective original techniques. Under carving we understand a treatment where the gradation of the surface of the relief in the third dimension mainly consists in part surfaces which meet in angles, whereas modelling has no such distinct part-surfaces in the third dimension but links them up by transitions so that edges do not exist. The effect of the one treatment is clean-cut and sharp, that of the other rounded and soft.

a feature of the Madhyaratha on each side of the Parasuramesvar. The principle is enlarged upon later inasmuch as every one of the main Pagas and not only the Madhyaratha is superseded by one more application and this is done differently according to the situation of the Paga: the Anuratha Paga shoots up with half Sikharas (miniature Rekha-shapes) diminishing in size in vertical succession (Pl. XVI, Fig. 2; portion of Rekha of Lingaraja; c. A. D. 1000) whereas the Kanyasa Pagas have their corners thickened and disguised by mouldings many times projecting and receding, beset as it were through their entire length by a thick ruff, as part of the body, fastened with Amla-ribs extended across the next Paga, to the bulk of the Gandi (Cf. Figs. 2 and I, Pl. XVI). Each Paga now is steeped in its own volume, borne by the impetus of the entire monument which has swelled into its maximum, like a ripe fruit. The Gavakşa net is still cast, but only along the Madhyaratha and is almost imperceptible (Pl. XVI, Fig. 2). Sculpture is concentrated on the Bara portion, all the corners, the whole 'architecture' itself having become plastic volume, there is neither scope nor need for figure higher up.

While in the earlier temples the impetus of the mass is vitally present in the simultaneous juxtaposition of articulate surfaces, in the many temples of this later phase, it is seen tingling in every part of its visibility with the sap that has made it swell, while at the same time the narrow mouldings airily cohere vertically and horizontally across the Pägas, irrespective of varied profiles. With it all the Pägas with their widely projected masses seem to grind the Rekha into turgid roundness, albeit above a rectangular plan while each Päga presses heavily and serpent-like towards its highest destination.

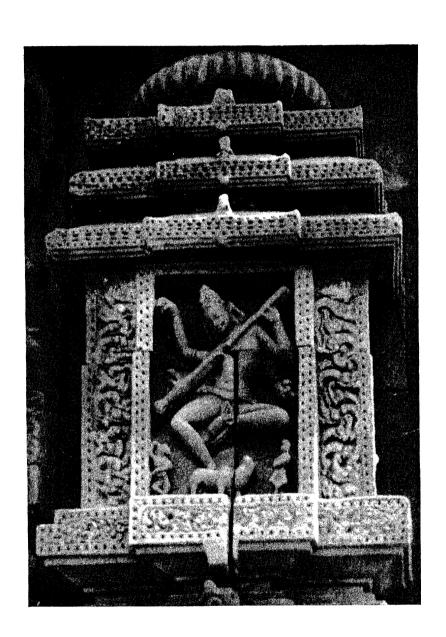
When in the exceptional Rāja Rānī temple (early twelfth century), miniature Sikharas are placed in front even of the middle Pāgas of each side, the Rekha is bereft of the Kalinga coinage of its upward urge. A conical monument results with just a tendency to overshoot its point. In connection with the Rāja Rānī an excursion to Central Indian temples will bring home this other possibility within Northern Indian building tradition and the manner in which they are contained in the same arche-mould.

Comparison with Nagara Type of Central India.

Of the Central Indian temples² of the tenth and eleventh centuries (Lakṣmanji, 954 A.D.; Viśvanātha, 1002 A.D.) the curvilinear Šikhara sallies forth with quickened

^{1.} Indian Antiquary, vol. XVIII, p. 169; Codrington, op. cit. Pl.. 59.

^{2.} Illustrations; Codrington, ibid. Pls. 70-72; Coomaraswamy, History, op. cit. Pl. LXIV.



speed, and right into a point. Its upwards urge is neither caught, nor does it intermingle with the outward impetus of the mass. The latter on the other hand is hypostasized into adjacent and minor half Sikharas and other independent shapes affixed to the main Sikhara. These afford a broad spread towards the base. Upward urge and outward impetus are not integrated in every part of the Central Indian temple but they have equal shares in the whole. The deep vertical recesses on the other hand, in the Bara portion of these temples lead up the eye to the curvilinear ascent of the Gandi. Here too the various components share in the make-up of the temple, are not integrated in every instance and fall asunder into flatly incised ornamentation on the straight wall, or plain mouldings, or else figures sculpture in the highest possible relief against a flat ground, the one next to the other. Never does the flat wall step forth with a higher tier of ornamented surface so that this in its turn serves as a ground for figure sculpture which has further advanced into space on a richly moulded and ornamented console. As there is no integration of wall and figure, the latter does not fulfil its function of being the highest specification of the mass: An all-round movement is as little visualized as a rounding of the single Pagas into turgid tubes. Round pilasters with serpents coiling around them are unimaginable in this variety of Aryavarta temples. Their Sikharas moreover are entirely spun over with interlaced Gavāksa patterns and are accentuated only at the corners by intervening Amlā courses. The result is that in Kalinga the monument has balance in every part, whereas in Central India, at the corresponding phase, the upward urge is more potent than the outward impetus. The latter is somewhat inertly present in the mass which adheres to the ground. As a whole and viewed along with the Kalinga type, the mass has less impetus, is more passive and unawakened while the upward urge vividly follows its course. So it comes about that horizontal mouldings run across the body of Garbha-grha and Mandapa and bind the mass of the two in wide extensiveness. whereas the Sikhara entirely whipped by the upward urge, -apart from the Amla clasps at the corners—has left behind horizontal definition. But in Kalinga the two cohere and the more explicit the form, that is the later date, the more minutely it is organised in every fraction.

Figure, the Highest Exponent of the Temple-body.

This refers to figure sculpture as well. From the tough breadth of the earliest types (Pl. XVII, Figs. 3, 4; XIX, Fig. 1), increasing differentiation leads to a modelling yielding in its round fullness (Pl. XXII, Fig. 1). The full bodied roundedness of these figures and of others dimpled in their chubbiness, at that stage has an oscillating outline. As far as images are concerned at

this stage, \$\frac{5}{a}\text{stric}\$ prescriptions and dark chlorite-stone make them sleek (Pl. XIX, Fig. 2). Differentiation of plastic details and minutiae of jewellery and apparel by which the flow of the earlier sculpture has not been held up, hem in a display of correctness. Still, in the figure of the peacock, the potency of the mass to some extent comes into its own.\(^1\) But whether image or not, the faces of betel-leaf shape and more articulate modelling show in their turn a more detailed, as well as humanized physiognomy.\(^2\)

While it is obvious that the broad spread of the sculpture of the Parasurāmesvar type is carried over into more precise articulation and an outline, less tense and comprehensive, but more loosened and oscillating in the subsequent monuments, for instance Kapālinī Devi,³ Bhuvanesvar, and Somesvar, Mukhalingam (Pl. XVII, Fig. 5, XVIII, Fig. 3), this tendency proceeds further and across the Muktesvar to the Rāmesvar, Citraguptesvar and allied temples. Within this passing from stage to stage of one notion of form, the interest may be concentrated on modelling yielding to the touch (Muktesvar, Rāja Rānī, Pl.XXII) or else on a treatment, less preoccupied with intimacies of modelling than with a keener outline and its freshly vitalized curves (Rāmesvar³, Citraguptesvar, eleventh century, Pl. XIX, Fig. 3,). Nearer specification works in the figures of human shape towards increasing consciousness. Formerly (p. 47) theirs was the face of Prakṛti, now they show that they know it active within themselves.

Another trait, not altogether peculiarly Orissan⁵ but dwelled upon in this province persistently throughout its phases, and more conspicuous even in the latter phases (from the tenth century) has to be pointed out. This is the way in which some of the figures stand, or bend their arms (Pl. XVII, Figs. 1, 3, 5). Knee or elbow, in these cases are not only stretched, but even help to bend arm

^{1.} The Kāma group (Pl. XIX, Fig. 1) seen against the Karttikeya image, (Pl. XIX, Fig. 2) is melting and abundant; chains, ribbons etc, appear to breathe with the body. But the family likeness is even more obvious.

All the time the attitude towards the material remains the same. The temples are mostly built of laterite of all hues. Some of them were, and still are stained red. From the tenth century images, and stelae of the Pārśvadevatās etc. are made of a greenish black sort of chlorite stone. This material facilitates preciser cognisability of sastric attributes and increasingly accumulating and explicit detail.

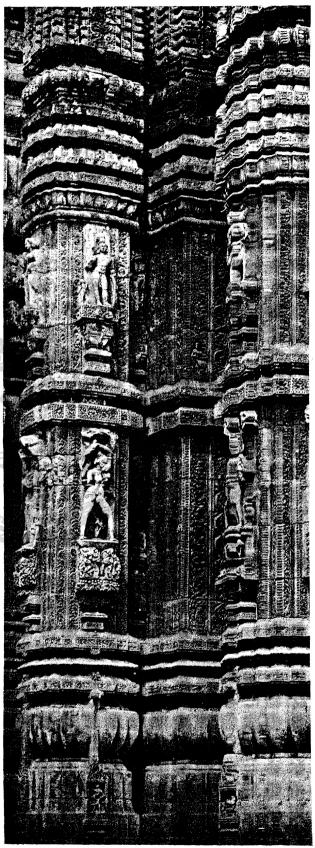
^{2.} The facial physiognomy, an application of the general formative physiognomy, is accordingly shown either as yieldingly tasting that abandon which the body communicates, or else with a sharper turn and cut it outlines the zest of life which activates it (Pl. XIX, Figs. 2, 3).

^{3.} Coomaraswamy, op. cit., Fig. 211; Codrington, op. cit., Pls. 60, 61.

^{4.} Kramrisch, Indian Sculpture, Fig. 100.

^{5.} Orissa is used here instead of the wider term Kalinga; architectonic principles are valid over a wider area, whereas sculpture shows a furthergoing differentiation in the various centres, cf. p. 44.





or leg away from the body (Pl. XVII, Fig. 3). The foot is preferably turned inward. This extreme application of pliability of limbs has certain affinities with the pole-like legs with knees stiffly stretched in which Western Indian sculpture abounds and from which classical as well as later on that of the South and East, (exluding Orissa) are free. Concerned as we are at present, with a purely physiognomical study, it is not the place to enquire into the circumstances that might have brought about these peculiar attitudes. Although within the range of postures possible to the extreme pliability of Indian joints, they become the favourite attitudes of Vṛkṣakās or Maithuna groups (Pls. XVII, Fig. 5; XXII, Fig. 2). Unspecified at first and signs only of a great bodily tension, they are preferably given to figures embodying erotic tension, and in this acute experience Orissan sculpture reveals its truest mien.

Still, although present from the outset, this strained, and at the end overwrought distension, is on the increase from the tenth century onward. With it the limbs may, or may not preserve plastic weight or modulation, for the prevalent tendency of this type of sculptures is to emphasize the tension, and to leave away as far as possible, mass as well as the widely ambient curvatures of outline, on which Orissan sculpture likes to dilate, where it is not seized by a more acute tension.

The latter achieves complete form (Pl. XX) by the eleventh century and it is of interest to witness here as well as in any other phase of Indian sculpture that there is no one trend of evolution but a simultaneous, integral or collateral, coming into form of diverse tendencies. As in a well twisted thread, the single parts—or trends—and their particles, apart from having no separate existence, show even of their intertwined state not the whole, but just that part which lies open to the eye and permits to judge how strongly they cohere.

Altogether in the eleventh century there is much refinement in Indian sculpture; a fondness of slender figures is joined by great delicacy of treatment. In this most elegant phase, whatever be the archetype plastically, not to speak of the subject-matter (see the Naṭarāja Pl. XXI), it is displayed with a slender ease. This factor, a symptom of a certain maturity, combined with the erotic tension so strongly apparent in Orissa, and with a linear treatment hitherto unknown in this province, leads to presentations as that of the Maithuna couple (Pl. XX), synchronous with Pl. XXI, (the latter on the wall of a temple with most variegated reliefs,2—some of them akin to Pl. XXII, Fig. 2—). Modelling has dwindled

^{1.} Kramrisch, op. cit. pp. 106, 107.

^{2.} ibid. Figs. 101, 102.

away in such figures (Pl. XX) and receded into a thin surface which is all reserve in faint suggestions and keen in its generalisations. The exuberance of the mass appears as if evaporating and while the most abstemious use is made of modelling, the little there is of body and abstracted volume is of highest nervous sensibility. It is this only that matters in touch and angle, by which such Maithuna figures are joined and worse than joined, held aloof in a fated union. Whilst they suffer it they savour it and their slow approach is but the tension between two strokes of lightening. Sharp profiles on either side, along which they glide into desire.

Such high achievement flows into other channels in the last constellation of Orissan sculpture. Sharp lines and angularity persist oftentimes in conjunction with a tight toughness (p. 47) of plastic mass. (The majority of Konāraka sculptures. thirteenth century). In one of its earlier aspects the latter component had clung to the walls of the Parasuramesvar type of temples (Pl. XVII, Fig. 4.). Then its mass was encased within the temple-body, now it has almost become free of it and achieved fullness. Into it may now be sunk the ambient oscillation of outline and subtle surface modelling, or it may be shot across and tightened by erotic intensity into heavy ardour towards an ultimate stage of knowing mastery2. It may in less achieved, but still integral formulations, lay its heavy volume with assurance into types widely current and frequently practised in this school; it is then obvious to see in this last phase of monumental sculpture in Orissa, the perennial existence of a classically Indian quality. The earnest spontaneity of form and feeling remains the same, whatever the motif, Kicaka (Konāraka), mother and child (Jagannātha, Puri), or horseman overriding demons (Konāraka) (Pl. XXIII, Figs. 1-3). At this stage too, (twelfth and thirteenth centuries) and in the fullness of means, an unsurpassable naturalism, —one is tempted to say, of the "bambino" (Pl. XXIII, Fig. 2.) so closely does this infant suggest those of the Renaissance—is encased by arms, numb in Incidentally it may be remarked that this mother would never do as a modelling. Their natural tie holds together mother and child and while absorbed and aggrandised by it, the mother takes account of and controls the situation, as the lovers do in their case (Pl. XX).

At this stage too, light and darkness no longer are meted out as counterparts of measured volume (Ps. XVII, XXI) but the monument draws space into itself and makes it corporeal for it looms dark where the relief is sunk in frame

^{1.} Springer. Handbuch der Kunstgeschichte, vol. VI; Kramrisch, Die indische Kunst, Fig. 321, p. 328.

^{2.} In some Maithuna couples.







or recess (Pl. XXIII, Figs. 2, 3). In return it gives out volume into unbounded vastness (Pl. XXIV), with figures as ultimate and furthermost heralds of a boundless power to grow into definite shape. Potent mass has put forth, and upwards urge keeps stalwart, those gigantic figures of the roof of the Mandapa of Konāraka, away from the walls of the building and yet one with them.

Summary.

A survey of Kalinga temples which keeps in view their essence, finds that dynamic mass while laying itself out simultaneously, is shot across by the upward urge. In this archetype with its coherence, impact and transcendency are contained the indissoluble connection of architecture and sculpture, the latter being the most specified aspect of the former as well as the 'evolution' of this type, with its jointly increasing differentiation of details and their commutation and contraction in growing comprehensiveness. The upward urge seems active within the form of each monument, and through their sequence in time. Seen in this way, time germinates in the archetype. The above refers to Kalinga temples if interpreted from within; seen from the outside they offer a physiognomy in which temple-body, ornamentation and figures are formed from case to case, in accordance. They are not exchangeable within, but are consistently and gradually brought forth by the archetype.

ILLUSTRATIONS.

Pl. XVI.

Fig. 1. Gandi (spire) of Parasurāmesvar temple, S. side, Bhuvanesvar, c. A. D. 800.

Fig. 2. Part of Bāra (wall of sanctuary) and Gandi (trunk of spire), N. side, of Lingarāja Temple, Bhuvaneśvar, about 1000 A. D.

Pl. XVII.

Fig. 1. Door lintel of Rāmeśvar temple, Bhuvaneśvar, c. A. D. 800. Siva and Pārvati on Kailāa in the centre, miniature gates and shrines with figures, head and linga, on the sides, above beading with motifs of wooden origin.

Fig. 2. Hamsalatā motif, from Pābhāga of Parasurāmeśvar temple, S. side.

Fig. 3. Acrobat between pilasters from frame of main niche, ibid.

Fig. 4. Gavākṣa, split and beaded, with Buddha-like figure of Śiva Lakuliśa (?), called Śankarācarya by the local people; divine devotees within, couples on wings of Gavākṣa; on side of Gaṇḍi, ibid.

Fig. 5. Jamb of niche frame, Somesvar temple, Mukhalingam, c. A. D. 900.

PI. XVIII.

Fig. 1. Side niche, Parasurāmesvar temple.

Fig. 2. Detached fragment from Bhuvaneśvar, c. A. D. 800; London, Private collection.

Fig. 3, Bara (wall of sanctuary, South side), Somesvar temple, Mukhalingam.

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Fig. 1. Kāma with Rati and Tṛṣṇā, Uttareśvar temple, Bhuvaneśvar, c. A. D. 800.

Fig. 2. Karttikeya from Puri, tenth century; London, Private collection.

- Fig. 3. Corner portion of wall of Citraguptesvar temple with Dopicha Virala (rampant lion with one face and two bodies on the edge and the two adjacent sides respectively, with rider and prostrate elephant below; Naga coiled round pilaster (see also Pl. XXII, Fig. 1). Eleventh century.
- Fragment of Maithuna couple, Bhuvanesvar, eleventh century, London, Private collection. Pl. XX.
- Miniature Bhadra shrine on wall of Brahmesvar temple, Bhuvanesvar, eleventh century. The black and Pl. XXI. white chess-board pattern of the Pirhas (tiers) and recesses of Gandi, and of frame, the modelling of the vanalată (scroll) panels make a frame rich and balanced in contrast, of Siva Națarăja, who, four armed and with a vina across his body dances on Nandin (re. this Eastern Indian type of Nataraja, cf. N, K. Bhattasali, Iconography of Buddhist and Brahmanical Sculptures in the Dacca museum, p. 111.).

Pl. XXII.

- Fig. 1, Portion of Bara (wall of cella) and Gandi of Muktesvar temple, Bhuvanesvar, middle tenth century.
- Portion of Bara, Raja-Rani temple, Bhuvanesvar, twelfth century. Fig. 2.

Pl. XXIII.

- Kicaka from Konēraka, thirteenth century. Private collection, Londor Fig. 1.
- Fig. 2. Mother and child, on North wall of Bara, Jagannatha temple, Puri, tweltth century.
- Fig. 3. Horseman riding over a fallen elephant and a horse; a demon (?) with shield and sword behind, on the right. Panel on wall of Mandapa, Konāraka.

Pl. XXIV.





A PAINTING FROM JAIPUR

By KHITINDRANATH MAZUMDAR,

The Govardhanadara scene (Pl. XXV)¹ belongs to a Kṛṣṇa lila series, painted in Jaipur in the seventeenth century. The subject has been frequently represented in Rājasthānī and Pahārī painting, but the phase illustrated here is not often met with. Krsna, the boy, is shown here vividly rushing along to shelter the rain-drenched people of Brndaban from the wrath of Indra, who is seen riding on his white elephant amongst the dark clouds, with a commanding gesture that bids the other gods to pour down rain. Krsna has not as yet touched the mountain which he will lift so that it shelters the people of Brndaban. He just raises his arm and the mountain seems to feel the gesture and to start rising up so as to allow the hand of the blue god to lift it further. The villagers have thought shelter under cloth of varied hues. They have spread it over themselves and their women, who surround them, each batch in a sheltered cavern of gaily coloured cloth, drawn over their heads. While these groups are huddled together resignedly, others approach,—two and two, wrapt within the cloth tied above their heads, with timid and worshipping movements,—the god who is to save them. One shepherd with a leaf-umbrella-hat on his head has come between the groups and watches stolidly, while another, with less cloth on but with more temperament, has further approached towards Kṛṣṇa and while pointing out his approaching shape, he turns back to the others with a gesture (What spontaneity in this abhaya mudra!). But what 'singleof assurance. handed' victory also the boy-god is about to achieve, when a chain of many-hued gods, with white flowers in their hair, lavishly pour down garlands of rain across mountains of clouds and yellow snakes of lightening.

The mountain itself soars like an island cut of precious gems against a green and refreshed earth, while there is much brooding gloom lurking on the horizon. In a wide arch it is raised behind the scene on earth, a dark rim to its joyous colours

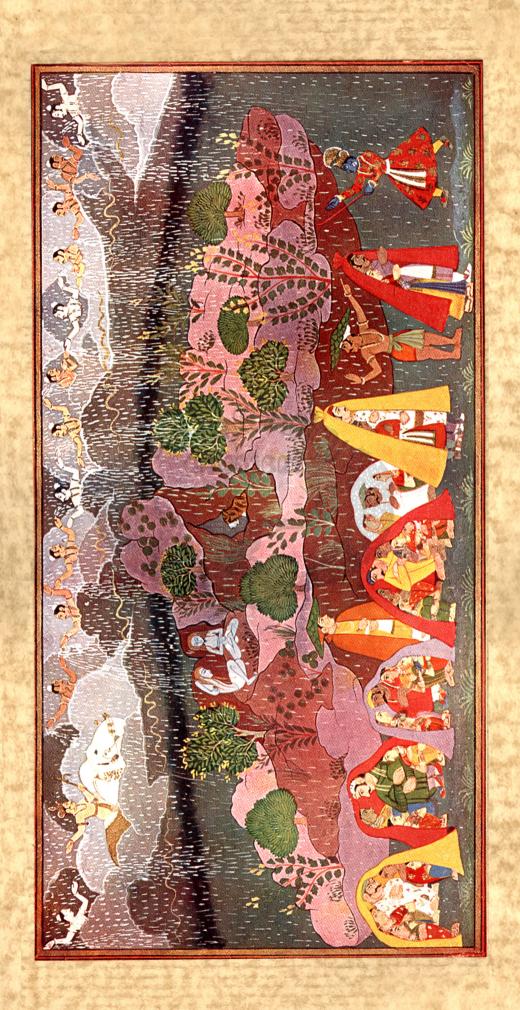
^{1.} Size of painting: 16" × 81/4"; Calcutta, Private collection.

flecked with rain, flecked also with a gay pattern of leaves and blossoms, swaying upwards or resting in clusters. The tiger in the cave, the practising yogis outside any shelter, up on the hill, reddish brown and pervanche blue, share in the exhilaration to come, anticipatingly with their colour.

The pale greys and white of elephant, clouds and gods, against the deeper browns of a tempestuous atmosphere reach to the dark zone which looms above the earth. From here downwards, the further, the gayer; the loudness of the people—as far as colours go—below, is subdued by the pink, mauve, russet and maroon zones of the hill. The painting full of colour and contrast is soothed by a white veil of rain.

Colour, gesture and the entire arrangement are spontaneous. An age-old myth is experienced afresh wish rustic refinement.





REVIEWS

The Transformation of Nature in Art. By Ananda K, Coomaraswamy. Cambridge, Mass., Harvard University Press: 1934. 8vo. 245 pages.

I do not hesitate to express my opinion that this is the finest book Dr. Coomaraswamy has written so far. For some time past it was evident to most of us that he was deeply interested in Indian æsthetics, and that something, some idea, was generally growing in his mind, for he has published a number of articles of outstanding interest dealing with aspects of the problem; yet few of us could have supposed that the ultimate outcome would be a book of an excellence such like the one before us. As a matter of fact, discriminating readers of his "History of Indian and Indonesian Art" must have received the impression that Dr. Coomaraswamy was more concerned with archæology and history than art of which there was very little said in that book. But this is a time of collecting and stating facts, and it will take a long time before people will realize that many objects which have been unearthed from the soil of India can be interesting from the point of view of archæology, but they are not necessarily works of art. Nay, a number of the most interesting objects are quite uninteresting for the art historian although they may thrill the archæologist.

From this book of Dr. Coomaraswamy it will become clear that he knows very well what real art should be. Although the first impression the reader receives from the pages will be that of a rather punditic work, it will be soon felt that behind and between the large number of quotations Dr. Coomaraswamy develops very distinct and lucid ideas of his own. His mastery of the subject is astonishing, but more inspiring is the deep understanding which lies behind all his quotations.

No doubt the first and the second chapters (The Theory of Art in Asia, and Meister Eckhart's View of Art) will impress most readers as the most important ones in the book. The absolute identity of the medieval European and the Indian æsthetic theories is striking enough, although the Chinese point of view (which I am unable to examine in the original) is not as clear as the author would like us to accept. Foremost among the æsthetic ideas of the Hindus and medieval Christians is that the artist is not a copyist or an imitator of Nature (as Aristoteles would have it), but a Creator, a Divine Maker, in whose mind (citta) the real work is "made"; the execution is a matter of skill, but the real creation is a matter of divine intuition and meditation; the artist has to approach his subject with something similar to devotional concentration; art needs "ekagrata" to put it this way, and a real masterpiece is the outcome of a state of mind that, I suggest, is twin-brother of William James's "religious experience". A quotation from the Sukranitisāra, p. 117 (already published in Mélanges Linossier) makes it clear that even if an artist studies the forms of nature (a horse), and has the model (bimba) before him, he must "make his visual contemplation" before he proceeds to work. It is the mental image that matters: an image that is nearer to God (which is in us) than the image which our eyes see (which is in matter). "Modern European art", says the author, (p. 31), "endeavours to represent things as they are in themselves, Asiatic and (medieval) Christan art to represent things more nearly as they are in God, or nearer to their source". This is clear thinking, and shared by modern (very modern) European artists in its entirety.

The idea of l'art pour l'art, art for art's sake, unfortunately still prevails in certain "artistic" circles. The perfect futility of this ill-conceived thought has been shown already in 1914 in that masterful introduction which Mr. Eric Gill wrote to Dr. Coomaraswamy's Visvakarma, and is now expounded at length in his freshly written book, "Art, and a Changing Civilisation" (The Twentieth Century Library, London: 1934). Every work of art must

serve a purpose outside itself: and Indian art, like medieval Christian art, was great art just on account of the fact that it served its purpose which was essentially religious. This immediately renders absurd the claim that art is a matter of feeling only and that æsthetic experience is a pure emotion. No; art has an end, and the intellect has a great deal to do with it. No æsthetic experience can possibly exclude entirely reason. The ultimate goal of art, as the author points out, is a perfection in which pictorial and formal elements are not merely reconciled, but completely identified. "At this distant but ever virtually present point, all necessity for art disappears, and the Islāmic doctors are justified in their assertion that the only true artist (muşavvir) is God, in Indian terms nirmāṇa-kāraka." (p. 21). The doctrine of art for art's sake, the author says in an excellent passage, is disposed of in a sentence quoted in the Sāhitya-Darpaṇa, V, I, Commentary: "All expressions, human or revealed, are directed to an end beyond themselves; or if not so determined, are thereby comparable only to the utterances of a madman." (P. 47).

Dr. Coomaraswamy sums up the Indian (and Chinese) theory of art as follows: "What are probably the most significant elements in the Asiatic theory are the views (1) that æsthetic experience is an ecstasy in itself inscrutable, but in so far as it can be defined, a delight of the reason, and (2)" that the work of art itself, which serves as the stimulus to the release of the spirit from all inhibitions of vision, can only come into being as a thing ordered to specific ends. Heaven and Earth are united in the analogy...of art, which is an ordering of sensation to intelligibility and tends toward an ultimate perfection in which the seer perceives all things imaged in himself." (P. 56f.) The expression "delight of the reason" is somewhat unfortunate but we understand what the author intends to say: nothing else, evidently, but that both reason and emotion have a share in the ecstasy which is the result of art; and when he writes "specific ends", he means, evidently just "perfection" or "realization of the Divine in ourselves". Though somewhat clumsy, I firmly believe, the above lines quoted from Dr, Coomaraswamy's book really represent the best definition of art ever given. This, surely, is the highest compliment I can pay to this fine book, and if in the following lines I offer a few suggestions they are not in the manner of criticism bur rather as thoughts that occurred to me while reading Dr. Coomaraswamy's book.

First of all, I would like to point out that theory and practice, as so often, are not always the same. In Europe sesthetic theories of the new times are definitly inferior to those of the middle-ages or to those of India; yet some magnificent masterpieces have been produced notwithstanding these theories. On the other hand, though the sesthetic theories in India were and remained excellent, not every piece of sculptured stone is a masterpiece in this country. Especially in later times when canonical rules and measurements were given for every detail, a large number of images were produced which are perfectly correct as regards their talas and iconography, yet they are far from being masterpieces. The artist's imagination and hand were, so to say, so entirely fettered by these rules that I can show Dr. Coomaraswamy many an image the maker of which certainly did not meditate at all before he produced his work, but constructed, as it were, the image in a mechanical, soulless way, not unlike architects of the last century in Europe who copied and combined house frontages from pattern books at their disposal. It is a fallacy to believe that art is unchanging. In India like everywhere else, there were periods of magnificent artistic production followed by decline: although the theories remained the same. And I believe that no sesthetic theories existed at the time of Bhārhut, Sāñcī and Amarāvatī, yet they are the most magnificent monuments India has produced.

This leads to the ultimate conclusion that it is not fine theories that make fine art. It is great artists, divinely gifted, exceptional people with a creative genius who can see the Divine element in Line and Colour. The best theory in the world does not make a single artist; and masterpieces can be produced by artists whose countrymen write rotten books on æsthetics.

What do I want to prove with this? Nothing particular, only perhaps so much that, if Indian art of ancient times is magnificent on the whole, that fact is due to many factors, but least of all to æsthetic theories. Most of all it is due, I suggest, to the fact that the inhabitants of India were essentially religious people and that they produced images with a purpose, and especially with a religious purpose. If this fact is found in Indian æsthetic theories, it is due to the same mentality of the same people. But the good images are not due to the good theories. Exactly the same applies to Europe. When Aristoteles first made his theory that art is an imitation of Nature, the Greek artists had already for two and half centuries imitated Nature. The best Greek sculptures, however, were made at a time when there were no theories existing.

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Secondly, as we are taking about Nature, it is a fact (and here we entirely agree with Dr. Coomaraswamy and Mr. Eric Gill) that European art of the last few centuries became on the whole an exaggerated imitation of the forms of Nature. I explain this as an outcome of that "scientific" spirit that prevailed in European civilization since the Renaissance. Man was so intensely interested in the outside world, so enamoured of the study of all that was outside him, that the artist became a kind of scientist: he recorded facts with the utmost precision, like a botanist or a mineralogist. It is perfectly true that this spirit was inartistic. The result was a form of colour-photography, otherwise called Academic art. Yet it would be quite wrong to conclude that a thorough study of Nature's form was in any way contradictory to art. "Naturalism in art has nothing to do with subject-matter in itself", says Dr. Coomaraswamy (p. 82). Yes, that is true. But Nature has to do a lot with art. Be it as a mere "garb" or "symbol" of the Divine: the forms of Nature have definitely a role in art. Did Indian artists not study animals? Some of their finest animal figures are evidently based on a thorough observation of the form "outside." The passage in the Sukranitisara to which I already referred says: "When a figure of a horse is to be made, the model should always be in view, and if one cannot be looked at, the figure should not be made." I would not go as far as that. I would only say that an artist should not endeavour to make an image of a horse if he has never studied a horse. In the actual moment of composition, I am certain, only the image in the mind matters. But previous study is a help towards "skill." I may mention that there is a school of artists in Europe and in India at present, members of which are literally afraid of making anything "like" Nature, so horrified are they at the photographic art recently produced. Well, the truth is this, that a great artist pours his divine view of Line and Colour and Shape in any material, even into a mere portrait or a landscape. Sieved through his mind, as it were, forms acquire a new significance, a depth and a New Life that are more than existed in the original. Meister Eckhart says that sesthetic experience is "a seeing of things in their perfection." The perfection is seen and added by the artist, but the things are there. Nature is a glorious storehouse of things into which we can "hineininterpretieren" perfection; or, in other words, a devotee sees God not in the temple only, but everywhere in Creation. (Rūpa-śobhā, p. 102, is the same: beauty of form).

The other chapters in the book have been already published, though they are corrected here and there in the present form. I object to the author's lately adopted translation of 'devas' by Angels. Angels and devas resemble each other very little, and the translation of devas is gods, with a small "g."

Such minor details, however, do not matter in a book of outstanding importance and lasting value.

C. L. Fabri.

Annual Bibliography of Indian Archaeology, for the Year 1932, Vol. VII. Kern Institute, 4-to, Pp. xii and 178, and plates I-X. Leyden: E. J. Brill Ltd., 1934.

The volume under review has made its timely and welcome appearance. In the introductory portion, as usual, a brief survey of the most important discoveries and explorations in the vast field of Indian and Indonesian archæology is given and the chief editor has rightly claimed for it a more representative character in the present volume than in its predecessors. H. Frankfort's leading article contains an interesting comparison of the finds of Mohenjo-daro with those discovered by himself in course of his recent excavations in the Akkadian city at Tell Asmar. After a brief but interesting survey of the architecture, metrology, religious monuments and seal designs of the Mesopotamian and Indus valley regions, he arrives at the inevitable conclusion that an important element in the population of the two regions belonged originally to a common stock.' He has nothing to say against the usually accepted view about the age of the Indus civilisation; but he would not describe it as chalcolithic as that would suggest too early a date. Sir Aurel Stein in his preliminary note on the results of his archæological tours in Southern Persia produces interesting evidence which would disprove the theory about direct maritime intercourse between Mesopotamia and the Indus valley in the period of chalcolithic civilization. His discoveries in the drainage-less basin of Bampur, about half-way between Elam and the Indus valley tend to prove that the contact between these two important centres of chalcolithic civilization was overland. M. Hackin's account of the explorations at Bāmiyān by the French Archæological Mission in Afghanistan refers to valuable data which throw much light on the question of Iranian influence in Buddhist art. The summaries of the epigraphical discoveries in India and on Indian numismatics by Dr. Vogel and Mr. R. Burn respectively, are useful. The meagreness of notices regarding archæological explorations in India is to be accounted for by the fact that such work in India has been restricted to a great extent on account of the financial stringency of the Indian Government.

We should like to suggest only one point. Sometimes the notices about the entries under different heads seem to be a little out of proportion. Thus, it happens that articles from daily papers (cf. p. 95, no. 254) or monthly journals of secondary importance are comparatively elaborately noticed. Happily, this is only occasional.

There is an elaborate index appended to the volume which is excellently illustrated by plates and figures.

Jitendra Nath Banerjea.

Canons of Orissan Architecture. By Nirmal Kumar Bose. pp. Iv and 281. Published by R. Chatterjee, Calcutta. 1932, Price Rs. 10/-

Mr. Bose has ably and scholarly edited for the first time manuscripts, containing architectural traditions prevailing in ancient Orissa. The author's knowledge of Orissa, her people and monuments, gained through years of intimate study and personal contact enhances the value of the work. He has secured several readings of Orissan canons of architecture and studied them with the help of local craftsmen. This has been supplemented by field work in different parts of Orissa and the neighbouring provinces. "When similar restorations are available for other provinces in India," he hopes in the Introduction, "and the existing examples of architecture studied in their light, it will be

possible to reconstruct the history of Indian architecture with some degree of certainty." We expect that in a future edition of this book, he would try to identify, and classify, the d tails of the existing examples of Orissan architecture, with the help of the light obtained from an intensive reading of the Śilpaśāstras.

Seven manuscripts have been examined mostly collected from the Puri district, in preparing the volume under review. "Five of the mss, are different recensions of the treatise on architecture named Bhuvana-pradipa, the rest are copies of different books dealing with the erection of thatched huts. The name of the latter book is merely given as silpipothi on silpa-sastra which means 'The Book of Art.'

The first chapter of the book under review deals with the Book of Architecture and its author. The classification of soils, described in the second, may provide food for reflection to modern engineers, who are often prone to neglect the importance of this fundamental aspect. After passing over a chapter on Augury, we come next to the Determination of the Nāga's position. "According to the śilpaśāstras, it is imagined that a great serpent (nāga) lies encircling every building site." Its body, divided into eight equal parts, moves round and round in a clockwise direction. This close association between the Nāga and ancient Orissan architecture both in theory and practice, we believe, may account for the great prevalence of the Nāga motif in Khmer architecture in Cambodia and Indonesia. Astrological considerations, auspicious ceremonies, and miscellaneous matters are dealt with successively. The classification of the different types of Orissan temples is not only extremely interesting but fully convincing. The characteristics of the Rekha temple, along with details of specification and construction, deserve the exhaustive treatment accorded to them. The reconstruction of the elevation of the Rekha Deul by late M. Ganguly in "Orissa and Her Remains" (Pl. II.) sufferred from a defect, as he erroneously identified the lowermost member as Jāngha instead of Pābhāga (Pādabhāga), resulting in a confused identification of the upper components. The Bhadra temple, the Khākharā temple, pedestals and other architectural features receive their due share of attention.

Great improvement upon Mr. Ganguly's list of technical terms is noticeable in our author's "Dictionary of Architectural Terms" at the end of the book. Some more material of the nature of the comparative study on Rekha temples, included in the Appendix A, would have been welcome. An attempt at the restoration of the text of Bhuvanapradipa is given in Appendix B. The numerous illustrations and diagrams, although not always of the same quality, add greatly to the attraction of the volume. More attention, however, should have been devoted to the transliteration of Sanskrit and Oriya words.

D. P. Ghosh.

Tiruparuttikunram and its Temples. By T. N. Ramachandran—(With appendices on Jaina units of measurement and time, Cosmology and Classification of souls). Bulletin of the Madras Government Museum, New Series-General Section, Vol. I, No. 3, Pp. 260, and 37 plates. Price Rs. 11-4.

Thanks to the efforts of Mr. Ramachandran, the small village of Tiruparuttikunnam, on the outskirts of Conjeeveram, has now become an important place for the student of Jainism, and ancient Indian architecture and painting. The author has proved that the modern village of Tiruparuttikunnam is to be identified with Jina-Kānci, one of the four Jaina vidyāsthānas. The village contains two Jaina temples one of Candraprabhā and another of Vardhamana. The temples supply us with an epitome of the main features of the mediaeval temple architecture of southern India. What is more, the verandah and the mandapa are adorned with paintings, depicting scenes from Jaina mythology and the life of Tirthamkaras. They also contain many inscriptions, and the author has contributed a valuable historical note on them.

No attempt however has been made by the author to judge the, technique and aesthetic value of the paintings, but as the book contains copious illustrations, it is hoped that a specialist would, in the near future supplement Mr. Ramachandran's labours. Some reproductions in colour would have enhanced the value of the work. The author is of opinion that the Sittanavāsal ceiling paintings are Jaina. It is evident that he has not consulted N. C. Metha's 'Studies in Indian Paintings' nor seen its first three plates. On the whole the book has added much to our knowledge of Jaina paintings.

